DMEA Form 9
(Rev. 5/57)

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE | Idm-E No. 58 | DMEA NO. 654

Application (Denied
(Withdrawn
(After disposition, delete items not applicable)

Contract (Terminated - not Certified
(Cancelled
(Terminated - Certified
(Royalty Agreement

The records contained in this file are marked (x) and arranged in this order:

Folder No. 1: Correspondence up to the end of 1953

Left Side

Royalty Audits 1/
✓ Certification of Discovery
X Cost Audits 2/
X Termination Notice or Agreement
Recision Notice
X Assignment of Contract
X Contract Amendments
X Contract with all exhibits and annexes
X Owner's Consent to Lien
X Subordination Agreement
X Application and attachments MF100
Envelope for maps

NOTE: other legal documents on bottom of left side

Right Side

✓ Project summary
✓ Work completed analysis
All other material filed in chronological order including the following reports if checked:

Field Team Semi-Annual Report for Certified Project
✓ Final Field Team Report (Tab) Folder #3
Operator's Final Report (Tab)
Interim Field Team Reports
Operator's monthly reports and all attachments
X On-site Exam Report (Tab)
Settlement Sheets
Drill Logs

Additional Folders:
Folder # 2 Correspondence from 1954 to 1-/31/57
Folder #3 Correspondence from 1/1/58 to _____ (including Analysis Semiannual Report on Certified Project - prepared from final FT report)

Left Side

Folder No. 5:
Analysis of Semi-Annual Inspection Reports
Interim Summary Reports by DMEA Engineers

Right Side

Field Team Semi-Annual Report for Certified Project
Field Team Interim Reports
X Operator's Monthly Report with transmittal, narrative, maps.

Folder No. 4 : Maps (Use pocket folder or envelope.) & SPECIAL REPORTS

Folder No. ____ : Settlement Sheets

Folder No. ____ : Drill Logs

Folder No. ____ : Royalty material

1/ Or reports of royalty review
2/ Or cost reports of review

16592

OFFICE OF MINERALS EXPLORATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF ROYALTY REVIEW

I have reviewed the files of the Washington office pertaining to Contract Idm-E58, Docket DMEA-654 (tin, columbium-tantalum, tungsten), dated July 16, 1951, with

Peggy Keenan, d/b/a Keenan Properties
and her assignee
Northwest Defense Minerals, Inc.
c/o Miss Peggy Keenan
Sheraton-Johnson Hotel
Rapid City, South Dakota

for the purpose of determining the amount of royalty payable to the U. S. Government on sales of minerals from property referred to as the Keenan Properties located in Lawrence County, South Dakota, during the period May 6, 1960, through March 6, 1964.

A certification of discovery or development was issued on May 29, 1959, and, in accordance with Article 2 and Annex II (a part of Amendment No. 8) of the contract, royalty is payable on all minerals produced from the land described in Article 2, Appendix I, and Amendments Nos. 3 and 8 of the contract for a period of 15 years from the date of the contract or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first. A Report of Review dated July 13, 1959, indicated accepted costs under the exploration contract amounting to $32,384.34 with the Government's contribution on a 90 percent basis being $29,145.91.

The status of the project, the scope of review, and the reasons therefor are stated on page 2.

This review found no sales subject to the Government's royalty subsequent to the period covered by a prior Report of Royalty Review which also found no sales subject to the Government's royalty through May 5, 1960. Accordingly, as of March 6, 1964, the royalty account of this project was found to be:

Total Royalty Payable	$ -0-
Total Royalty Paid	-0-
Balance of Royalty Due	$ -0-

March 10, 1964

E. D. Talbert, OME Auditor

Idm-E58 Northwest Defense Minerals, Inc., Assignee DMEA-654

STATUS OF PROJECT, SCOPE OF REVIEW
AND REASONS THEREFOR

This contract as amended provides that the Operator, as principal if the producer or as surety if not the producer, shall pay to the Government a percentage royalty on all minerals produced from the land thereunder. The land consists of 49 placer claims on Potato, Bear, and Beaver Creeks in the Rawlins Mining District. In consideration of the contract and amendments thereto, subordination agreements and/or consents to lien were executed by the several owners: W. O. Fillmore on June 16, 1951, October 16, 1952, and July 26, 1954; W. O. and Lillian G. Fillmore on July 26, 1954; Dakota Tin & Gold Co. (Lillian G. Fillmore, Secty.-Treas.) on June 16, 1951, and October 29, 1954; Black Hills Tin Company on October 14, 1952, and August 26, 1954; and Northwest Defense Minerals, Inc. (Peggy Keenan, President) on September 27, 1954. On December 13, 1954, the Government consented to the assignment of the exploration contract from Peggy Keenan to the Northwest Defense Minerals, Inc., a Maryland corporation, without releasing the assignor from the provisions of the contract.

Exploration work by the Operator under the contract was terminated effective November 1, 1957, under the provisions of a Termination Agreement executed on August 15, 1958. There was no production from the property during the exploration period and subsequent examinations of the property and inquiries by regional DMEA and OME representatives disclosed neither production nor change in property status thereafter through March 7, 1960.

In January 30, 1964, replies to MME Form 63 inquiries, W. O. Fillmore (for himself and for the Dakota Tin & Gold Co.) indicated that neither production nor change in property status had occurred since April 18, 1962. In a March 6, 1964, reply to a MME Form 63 inquiry, Peggy Keenan (as president of Northwest Defense Minerals, Inc.) specified that since March 7, 1960, there had been neither production nor change in property status.

This review was made in lieu of an on-site audit of the Operator's accounts and records for the following reasons:

(1) The files indicate that no minerals have been produced from the property since the date of the contract; and
(2) The administrative cost to the Government of an on-site royalty audit at this time would be excessive in relation to the amount of possible royalty which might be disclosed.

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OFFICE OF MINERALS EXPLORATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF ROYALTY REVIEW

I have reviewed the files of the Office of Minerals Exploration, Washington, D. C., and the Acting Field Officer, OME Region III, Denver, Colorado, pertaining to Contract No. Idm-E58, Docket No. DMEA-654 (Tin, Columbium, Tantalum, Tungsten), dated July 16, 1951, with

Northwest Defense Minerals, Inc.
1322 Second Avenue
New York, New York

for the purpose of determining the amount of royalty due the U. S. Government on sales of minerals from property referred to as Keenan Properties located in Lawrence County, South Dakota, during the period July 16, 1951, through May 5, 1960.

A certification of discovery or development was issued on May 29, 1959, and, in accordance with Amendments Nos. 8 and 9 of the contract, royalty is payable on all minerals mined or produced from the land described in Article 2 of the contract for a period of 15 years from the date of the contract or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first. A Report of Review in lieu of final audit dated July 13, 1959, indicated accepted costs under the exploration contract amounting to $32,384.34 with the Government's contribution, on a 90 percent basis, being $29,145.91.

This review was made in lieu of an on-site audit of the Operator's accounts and records for the following reasons:

(1) Inspection reports by representatives of the Field Team, Region III, and other documents in the regional files indicate that no minerals were mined or produced from the land described in Article 2 on which royalty would be payable to the Government during the progress of the exploration work or subsequent thereto; and
(2) The administrative cost to the Government of an on-site royalty audit at this time would be excessive in relation to the amount of possible royalty which might be disclosed.

C. E. Fisher
C. E. Fisher, OME Auditor

May 6, 1960

OFFICE OF MINERALS EXPLORATI
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF REVIEW

I have reviewed the Monthly Reports of:

Northwest Defense Minerals, Inc.
118 East 40th Street
New York City, New York

pertaining to Exploration Project Contract No. Idm-E58, DMA No. 654X, including Amendments Nos. 1 thru 15, and Termination Agreement dated August 15, 1958 for the period July 16, 1951 to January 1, 1959, inclusive, covering a project for the exploration of Tin, Columbium, Tantalum, Tungsten, on property known as Keenan Properties located in Lawrence County, South Dakota.

My review included an examination of the Monthly Reports (Form MF-104) and supporting documents attached thereto, comparison of the costs claimed with the contract and pertinent schedules, verification of work performed by reference to Field Team reports and correspondence, and a determination of the reasonableness and propriety of the costs.

This review was made in lieu of a final audit of the Operator's accounts and records for the reasons given on the attachment to this report.

The review disclosed the following facts in regard to the amount paid or to be paid the Contractor:

Total cost as billed by Contractor		$26,960.02
Exceptions: (Schedule attached)		
Prior to this review	$122.92	
Less: Reinstatement by review	0	
Herewith	330.98	453.90
Total Accepted Cost		$26,506.12

The contract calls for a 90 percent participation of exploration expenses by the United States Government. Therefore, payment to the contractor by the Government in the amount of Twenty Three Thousand Eight Hundred Fifty Five and 51/100ths Dollars is valid and proper, provided that the Regional Executive Officer, the Director, orother competent official has accepted or will accept the project as having otherwise met the terms of the contract.

Amount payable to Operator		$23,855.51
Less:		
Pro rata share of Government incurred cost for sample analysis as proveded by Termination Agreement: (10% of $5,878.22)	$ 587.82	
Amount reimbursed	23,267.69	23,855.51
Balance Due Operator		$ 0

Total Government contribution (including 90% of $5,878.22) $29,145.91

July 13, 1959

Donald T. Finch
Donald T. Finch
OME Auditor

REASONS FOR REPORT OF REVIEW IN LIEU OF FINAL AUDIT

CONTRACT NO. IDM-E58 DOCKET NO. DMA 654X

NORTHWEST DEFENSE MINERALS, INC.

(a) Accepted costs of $19,000.00, applicable to Phase No. 1, adjusted to conform with Amendment No. 2 to the Exploration Contract were covered in a Report of On-Site Audit dated April 4, 1952, as amended on May 27, 1952.

(b) The monthly reports applicable to Phase II were supported by documentary proof of that portion ($1,742.50) of the costs which covered work performed at unit rates under independent contract and that portion ($5,763.62) which covered other costs for contribution by the Government on the basis of actual costs (per summary attached).

(c) The Administrative cost to the Government of an audit would be excessive in relation to the estimated amount of possible further disallowances thereunder.

NORTHWEST DEFENSE MINERALS, INC.

CONTRACT NO. IDM-E58 DOCKET NO. DMA 654X

SCHEDULE OF EXCEPTIONS

Disallowances by Field Team		
Labor on Test Pits not authorized	$279.17	
Reenstatements by Field Team		
6¼ ft Test Pit at $25.00/ft		
Previously disallowed pending completion of work	156.25	
Net Disallowances by Field Team		$122.92
Disallowances During Review		
2½ Days Technical Services at $50.00/d	125.00	
(Technical Services performed Nov. 1,2, and 3, 1957 which was after Termination Agreement dated August 15, 1958 became effective		
Workmen's compensation applicable to wages in excess of those allowed	5.51	
Disallowance because of Operator's failure to file Final Engineering and Geologic Report. Authorized by Operating Committee	200.47	
Total Disallowances during Review		$330.98
Total Disallowances		$453.90

The Executive Officer, OME Field Team, Region III and the Auditor, concur with the foregoing disallowances and reenstatements.

NORTHWEST DEFENSE MINERALS, INC.

CONTRACT NO. IBM-858

DOCKET NO. DMEA 654X

SUMMARY STATEMENT OF COSTS

	Phase I Total Accepted Costs 7/16/51 to 9/30/51 as Adjusted by Amend. No. 2	Phase II Total to Date MF-104, 11/3/57	Phase II Distribution Corrected	Disallowances Prior to this Review	Reenstatements Prior to this Review	Disallowances During Review	Accepted Cost Phase II	Total Accepted Cost
Independent Contracts								
Drilling - Churn		$1,742.50	$1,742.50				$1,742.50	$1,742.50
Test Pits		631.25	631.25		$156.25		787.50	787.50
Bulldozing			263.50				263.50	263.50
Labor and Supervision								
Labor	$7,915.84		979.10	$279.17			699.93	8,615.77
Technical Services		2,525.00	2,525.00			$125.00	2,400.00	2,400.00
Operating Materials and Supplies								
Gas and Oil		208.85	208.85				208.85	208.85
Travel Expenses		308.92	308.92				308.92	308.92
Other Supplies	1,292.69							1,292.69
Operating Equipment								
Rental	6,797.54							6,797.54
Miscellaneous								
Repairs to Equipment	70.74		110.92				110.92	181.66
Sampling and Analysis		338.00	338.00				338.00	338.00
Meals and Quarters		784.98	784.98				784.98	784.98
Extra Copies of Assay Reports			10.00				10.00	10.00
Compensation Insurance			28.00			5.51	22.49	22.49
Steel Drums			23.50				23.50	23.50
Other	2,923.19							2,923.19
Contingencies		1,420.52						
Parcel Post on Assay Samples			5.50				5.50	5.50
Disallowance, Operator's failure to submit Final Engineering and Geologic Report						200.47	200.47	200.47
Totals	$19,000.00	$7,960.02	$7,960.02	$279.17	$156.25	$330.98	$7,506.12	$26,506.12

Total cost of Sample analyses by Govt. 5,878.22

Total cost of project $32,384.34

Docket Copy

Selfridge

CERTIFICATION BY THE UNITED STATES OF AMERICA
OF A DISCOVERY OR DEVELOPMENT UNDER
AN EXPLORATION PROJECT CONTRACT

To: Miss Peggy Kaenan, President
Northwest Defense Minerals, Inc., Assignee
No. 1 D
1322 Second Avenue
New York 21, New York

Pursuant to the provisions of Exploration Project Contract No. Idm-258, dated July 16, 1951 (Docket No. DMEA-654), hereinafter called the "contract," between the Northwest Defense Minerals, Inc., a Maryland corporation, and the United States of America, hereinafter called the "Government"; to establish and fix the Government's percentage royalty on production and its lien therefor and on the land described in the contract, the Government considers and therefore certifies that discovery or development from which production may be made has resulted from the exploration work.

The nature of said discovery or development is described broadly or indicated as follows:

Placer gravel deposits containing tin, columbium-tantalum, and tungsten minerals were penetrated and exposed by the project work along Bear and Beaver Creeks. Churn drilling, test pitting, trenching, and sampling provided sufficient data to calculate reserves of tin, columbium-tantalum, and tungsten.

THE UNITED STATES OF AMERICA

By Frank E. Johnson
Acting Director, Office of
Minerals Exploration

Dated: MAY 29 1959

FLKnouse/fw/GCSelfridge/hb (5/21/59)
Copy to: Docket
Dir. Read. File
OME Field Team, Reg. III (2)
Frank D. Lamb, Rm. 3608
T. H. Kiilsgaard, Rm. 5222
Operating Committee
F. E. Johnson
Div. of Contr. Admin. & Audit
F. L. Knouse (2)
Finance Officer

-continued-

DMEA-654, Idm-E654, certification (contd.)

Copies also to:

Miss Peggy Keenan, c/o W. C. Broadgate, 421 Tower Bldg., Washington 5, D. C.
Miss Peggy Keenan, d/b/a Keenan Properties, No. 1 D, 1322 Second Avenue, New York 21, New York
Miss Peggy Keenan, d/b/a Keenan Properties, c/o W. C. Broadgate, 421 Tower Bldg., Washington 5, D. C.
Mr. James Everett Bacon, vice president, Northwest Defense Minerals, Inc., 600 Woodside Parkway, Silver Spring, Md.
Mr. W. O. Fillmore, Spearfish, South Dakota.
Mrs. Lillian G. Fillmore, Secretary-Treasurer, Dakota Tin and Gold Co., Spearfish, S. D.
Mrs. Lillian G. Fillmore, Spearfish, S. D.
Mr. Ross J. Beatty, Jr., president, Black Hills Tin Co., 332 South Michigan Ave., Chicago 4, Illinois.
Mr. Clarence A. Fredell, Dir., Technical Research & Dev. Div., GSA, Washington, D. C.

Docket Copy

Hickman
5/9 J. Lynch
Hoffland
Asst. Sol. Off.
Talbert

CERTIFICATION BY THE UNITED STATES OF AMERICA
OF A DISCOVERY OR DEVELOPMENT UNDER
AN EXPLORATION PROJECT CONTRACT

INTERIOR DEPT.
MAY 18 1959
SOLICITOR

To: Miss Peggy Keenan, President
Northwest Defense Minerals, Inc.
No. 1 B
1922 Second Avenue
New York 21, New York

Pursuant to the provisions of Exploration Project Contract No. Idm-358, dated July 16, 1951, (Docket No. DMEA-654), hereinafter called the "contract," between the Northwest Defense Minerals, Inc., a Maryland corporation, and the United States of America, hereinafter called the "Government", to establish and fix the Government's percentage royalty on production and its lien therefor and on the land described in the contract, the Government considers and therefore certifies that discovery or development from which production may be made has resulted from the exploration work.

The nature of said discovery or development is described broadly or indicated as follows:

Deposits of tin, columbium-tantalum, tungsten-bearing placer gravel occurring along Bear and Beaver Creeks were penetrated and exposed by the project work. Churn drilling, test pits, trenches, and sampling provided sufficient data to enable the calculation of reserves of tin, columbium-tantalum, and tungsten.

THE UNITED STATES OF AMERICA

Dated: _____

By _____
Acting Director, Office of
Minerals Exploration

Attorney

App'd Sol. on

CERTIFICATION BY THE UNITED STATES OF AMERICA
OF A DISCOVERY OR DEVELOPMENT UNDER
AN EXPLORATION PROJECT CONTRACT

INTERIOR DEPT.
MAY 18 1959
SOLICITOR

Mr. Percy Seaman, President
Northwest Uranium Mineral, Inc.
No. 1 D
1522 Second Avenue
New York 21, New York

Pursuant to the provisions of Exploration Project Contract No. IDM-[illegible], dated July 16, 1956, (Docket No. IDM-[illegible]), hereinafter called the "Contract," between the Northwest Uranium Mineral, Inc., a Maryland corporation, and the United States of America, hereinafter called the "Government," to establish and fix the Government's percentage royalty on production and the lien interest and on the land described in said contract, the Government confirms and therefore certifies that discovery or development from under production may be made has resulted from the exploration work.

The nature of said discovery or development is described broadly or indicated as follows:

Uranium ore (U3O8), vanadium-uranium, manganese-uranium, copper mineral occurring along Pass and Beaver Creeks were prospected and exposed by the project work. Open drillings, test pits, trenches, and sampling provided sufficient data to provide the calculation of reserves of U3O8, vanadium-uranium, and manganese.

THE UNITED STATES OF AMERICA

By _____
Acting Director, Office of
Minerals Exploration

Dated _____

DEFENSE MINERALS EXPLORATION ADMINISTRATION

Contract Administration and Audit Division

AUDIT CERTIFICATE

I have examined the records and transactions of:

Keenan Properties

Spearfish, South Dakota

pertaining to Exploration Project Contract No. E-58 for the period of July 16 through September 30, 1951.

My examination was made in accordance with generally accepted standards applicable in the circumstances.

The audit disclosed the following facts in regard to amount to be paid the contractor:

Total cost as billed by contractor -	$20,963.25
Exceptions taken by the government -	2,345.21
Total accepted cost	$18,618.04

The contract calls for a 90 percent participation of exploration expenses by the United States Government. Therefore, the amount of reimbursement to be paid the contractor by the Government is:

Sixteen thousand seven hundred fifty six dollars and 24/100

$ 16,756.24

This certificate is issued on the provision that the Executive Officer, the Administrator, or other competent official accepts the project as having otherwise met the terms of the contract.

April 4, 1952

Robert M. Hull
Auditor

Keenan Properties
Exploration Project
Contract Idm E-58

I. INTRODUCTION

An audit was made on April 1, 2 and 3, 1952, of Defense Minerals Exploration Contract No. Idm E-58, Keenan Properties. The records pertaining to this contract are in the office of the Supervising Engineer, U. S. Bureau of Mines, Rapid City, South Dakota. The audit covered the period of July 16 through September 30, 1951. Neither the Operator, Peggy Keenan, nor the accountant, W. A. Rich, were available for consultation. Mr. Donald H. Mullen, Supervising Engineer, U. S. Bureau of Mines, was consulted constantly as he was familiar with the work and records of the project.

II. EXTENT AND SCOPE OF AUDIT

1. Labor

The work sheets for the entire period under audit, July 16 through September 30, 1951, were examined. The only records available for checking were the work sheets upon which the employee's wages and all other expenditures were shown. The rates of pay were those set forth in the contract and amendment.

There were no time cards and no formal payroll, labor being charged to the project based upon the verbal report of the Operator. It was not possible to ascertain absolutely that any employee worked a given number of hours or days on the project beyond that of the word of the Operator. The forms MW-104 were prepared from these data.

2. Supervision

Supervision was based on a distribution made up by the Operator, the basis being the employee's time actually spent on the project.

Item	Description	Amount	
107	Spearfish Hotel	$ 3.00	
108	Eastern Photostat	2.20	
110	W. C. Broadgate	18.71	
131	Alex Johnson Hotel	7.50	
Cash	Telephone call to Washington	8.61	
140	N. W. Bell Telephone Co., call to Washington	8.69	
160	Hotel Spearfish, telephone call to Washington	3.50	
175	N. W. Bell Telephone Co., call to Washington	11.19	
185	W. C. Broadgate	21.94	
213	N. W. Bell Telephone Co., call to Washington	4.94	
	Cash expenditures, telephone	1.24	
Cash	W. W. Johnson, local travel	13.69	
"	W. C. Broadgate	12.34	
"	W. W. Johnson, San Francisco Acct., Western Union	6.94	
"	" " " " " "	2.25	
"	Lakota Lodge, W. W. Johnson, travel	7.50	
"	N. W. Bell Telephone Co. and Western	8.49	
	Total	$ 142.73	$ 142.73
	Purchase of Equipment	1,482.41	
	Excess labor - Rockers	670.80	
	Sampler helpers	49.27	2,202.48
	Grand Total		$ 2,345.21

Exception was taken also to the method the Operator used in maintaining his records and the erroneous classification of costs on the MF-104.

The Audit Certificate, prefacing this report, reflects the total amount of the costs properly chargeable to this project.

Government's copy

DMEA
RECEIVED AUG 22 1958

DATE	INITIALS	CODE
8/22	J.L.a.	245
8/22	ZLK	200

TERMINATION AGREEMENT

It is agreed this 15th day of August, 1958, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government", and Northwest Defense Minerals, Inc., assignee, hereinafter called the "Operator", parties to that certain Exploration Project Contract Idm-E58, Docket No. DMEA-654, dated July 16, 1951, as amended, hereinafter called the "Contract", that:

1. Effective November 1, 1957, the Contract and all obligations of the parties thereunder, except as otherwise herein expressly provided, shall be and are hereby terminated.

2. The Operator shall furnish the Government with all of the materials excavated from all churn drill holes (drill cuttings) for transporting to a qualified independent laboratory, and for processing and analyses of samples.

3. In lieu of concentrating the metals and minerals from the material recovered from the churn drill holes by the method referred to in Paragraph 2 of Amendment No. 12, and as set forth in the Flow Sheet referred to and attached to amendment No. 12, the metals and minerals may be concentrated as set forth in the attached Flow Sheet entitled "Acceptable Alternate Flow Plan Northwest Defense Minerals, Inc., Lawrence County, South Dakota".

The material recovered from each churn drill hole shall be processed into two individual concentrate samples as follows:

(a) All material recovered from the collar of the drill hole to the bottom of the sampling interval above bedrock; and

(b) All the material recovered from the bottom of the sampling interval (item (a) above, including bedrock) to the bottom of the next sampling interval.

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DMA
RECEIVED AUG 22 1958

DATE	INITIAL	CODE

(c) A representative split of each concentrate sample shall be assayed for tin, columbium-tantalum, tungsten, and gold, and a representative split of each concentrate sample shall be furnished the Operator.

4. One representative concentrate sample furnished by the Operator which was recovered from each test pit shall be assayed for tin, columbium-tantalum, tungsten, and gold.

5. The Operator shall promptly perform all winding-up and settlement actions provided for in the Contract, including the rendering of the final report and final account, and shall contribute its pro rata share of the costs incurred by the Government in connection with the transportation and analysis of samples as provided in paragraphs numbered 2, 3, and 4 of this Termination Agreement. The Operator, upon payment of its pro rata share of the costs incurred by the Government, shall be furnished with a copy of the laboratory report.

6. The Government shall contribute to the allowable costs incurred prior to said effective date, and shall contribute to the allowable costs incurred beginning with said effective date and ending not later than January 1, 1959, in performing winding-up and settlement actions, including the making and rendering of a comprehensive final geologic and engineering report. The necessary cost of this work may be paid from any funds allotted to the project which have not been expended.

7. All rights of the Government respecting certification of discovery or development, percentage royalty and liens to secure payment thereof, reports (including preservation of Operator's records), accounts, audits, and the right to recover any overpayment, are hereby preserved.

8. The Operator hereby releases and agrees to save the Government harmless from all claims or demands under or arising out of said Contract, except as otherwise provided in this Termination Agreement.

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D M E
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Long
App'd. Sol. Off.
Chambers
Selfridge
Johnson

IN WITNESS WHEREOF, these parties have executed this agreement as of the day and year first above written.

THE UNITED STATES OF AMERICA

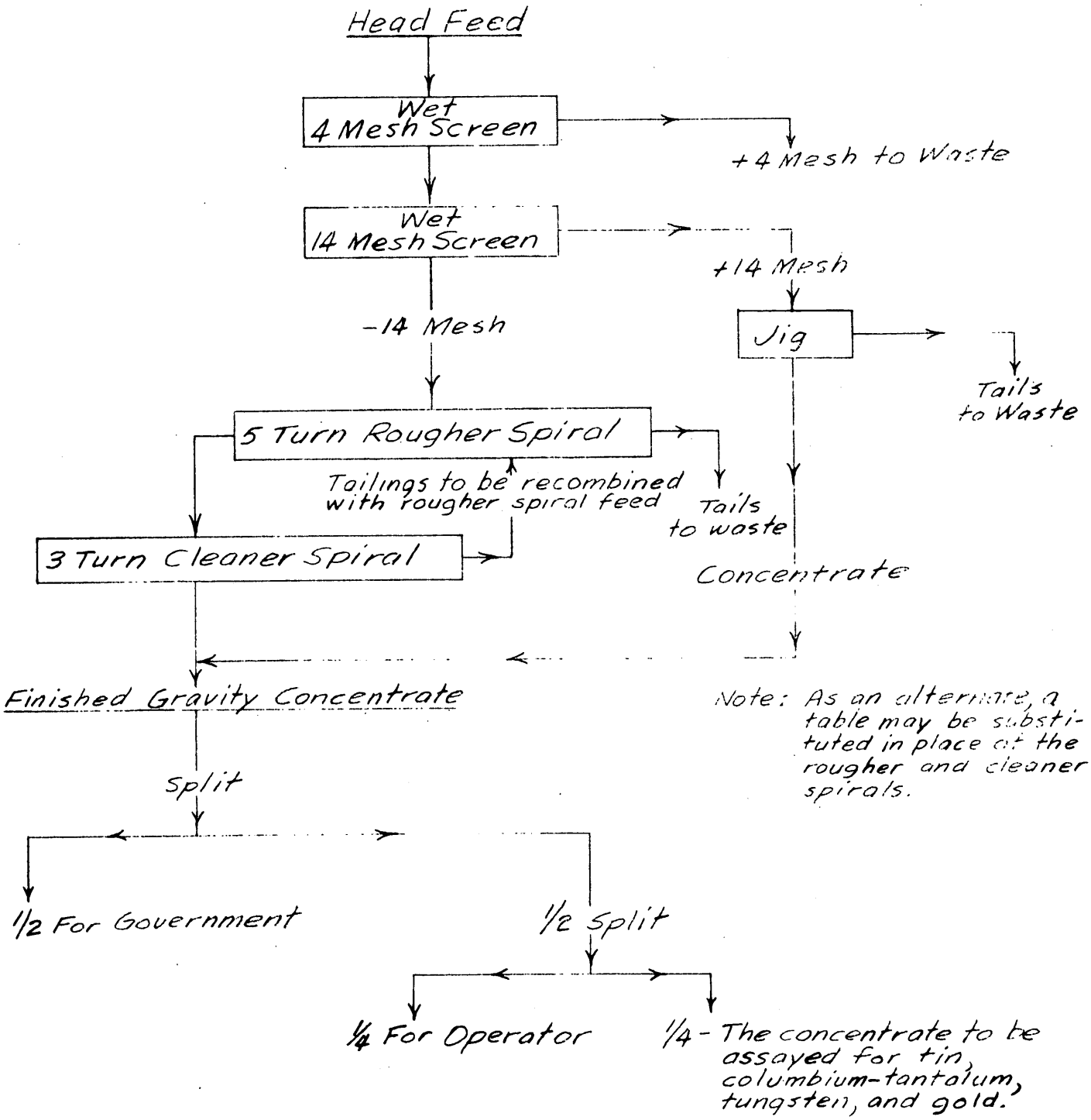
By _____
Administrator, Defense Minerals
Exploration Administration

NORTHWEST DEFENSE MINERALS, INC.

By _____

Title President

OFFICIAL FILE COPY
D M E A
RECEIVED
DATE : [illegible] 22 1958
CODE



Acceptable Alternate

Flow Plan

Northwest Defense Minerals, Inc.

Lawrence County, South Dakota

Docket DMEA-654 Contract Idm-E58

OFFICIAL FILE COPY
DMEA
RECEIVED AUG 22 1958

DATE	INITIALS	CODE

March 24, 1958

JUSTIFICATION FOR CONTRACT TERMINATION

Docket No. DMEA-654
(Tin, columbium-tantalum, tungsten)
Contract No. Idm-E58
Northwest Defense Minerals, Inc.
Keenan Properties
Lawrence County, South Dakota

The Operator completed the drilling of 18 churn drill holes and the sinking of two test pits during the late autumn of 1955. This work was allowed by Amendment No. 3, dated October 28, 1952. The excavated material recovered from the drill holes and test pits (with the exception of 1-1/4 cu. yds.) was stored on the property. Various extensions of time were granted the Operator to complete the processing of the excavated material from the test pits and drill holes and analyze the recovered samples. Finally, the Operator was requested to complete the work by October 31, 1957, or deliver the samples to the Government. Since the Operator has failed to carry out the exploration program as was agreed in the contract and has shown little interest in completing the work, the contract should be terminated.

F. L. Knouse

F. L. Knouse

Ellis

Docket copy

ASSIGNMENT OF CONTRACT

WHEREAS, Peggy Keenan, doing business as Keenan Properties, hereinafter called the "Assignor," entered into Exploration Project Contract Ian-[illegible] (Docket No. DMA-654X), dated July 16, 1951, as amended, hereinafter called the "Contract"; and

WHEREAS, the Assignor assigned her interest in all the land which is the subject of the Contract to Northwest Defense Minerals, Inc., a Maryland corporation, hereinafter called the "Assignee";

NOW THEREFORE, the Assignor, in consideration of the sum of One Dollar ($1.00) and other good and valuable consideration received from the Assignee, does hereby assign, transfer, and convey to the Assignee all of her right, title, and interest in the Contract, including all property acquired under the Contract and any and all other property devoted by the Assignor to the exploration work under the Contract. The Assignor consents to all future amendments of the Contract, and hereby releases the Government from any and all claims, past, present, or future, arising out of the Contract.

This assignment is subject to the written acceptance by the Assignee of the terms, provisions, and conditions of the Contract and to the written consent of the Government.

Dated this 7th day of December 1954.

KEENAN PROPERTIES

By Peggy Keenan

ASSIGNEE'S ACCEPTANCE

The Assignee, Northwest Defense Minerals, Inc., hereby accepts the above assignment and agrees to be bound by the terms, provisions, and conditions of the Contract.

Dated this 7th day of December, 1954

NORTHWEST DEFENSE MINERALS, INC.

By Peggy Keenan, President

GOVERNMENT'S CONSENT

The Government, this 13th day of December, 1954, hereby consents to the above assignment without releasing Peggy Keenan, doing business as Keenan Properties, from any of the terms, provisions, and conditions of the Contract.

THE UNITED STATES OF AMERICA

By C. Mitteudorf
Administrator, Defense
Minerals Exploration
Administration

Gustin
Hoffford
Ellis
Chumbler
Leffredge
Johnson

Docket Copy

Appd. Sol. Off.

EXPLORATION PROJECT CONTRACT
NORTHWEST DEFENSE MINERALS, INC., Assignee
DOCKET NO. DMEA-654

RECEIVED
OCT - 1956

Amendment No. 15

It is agreed this 19th day of September, 1956, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and Northwest Defense Minerals, Inc., Assignee, that Exploration Project Contract No. Idm-858 (Docket No. DMEA-654), dated July 16, 1951, as amended, is hereby further amended as follows:

> The time for completion of the work specified in the Contract, as amended, is extended to November 15, 1956, but only for the purpose of completing the processing of, and analytical work on, the samples from test pits and drill holes completed prior to January 1, 1956.

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate total amount which the Government may be required to contribute, the allowable maximum cost of any item of work, or the agreed unit cost of any item of work.

IN WITNESS WHEREOF, the parties hereto have executed this agreement as of the day and year first above written.

THE UNITED STATES OF AMERICA

By C. M. Mitchell
Administrator, Defense Minerals
Exploration Administration

NORTHWEST DEFENSE MINERALS, INC.

By Peggy Keenan

Title President

Docket copy

drdrtt 7/2/56
dlmyfrm
Approved
F L Brown
Chas Chamberlain
Selfridge

EXPLORATION PROJECT CONTRACT
NORTHWEST DEFENSE MINERALS, INC., ASSIGNEE
DOCKET NO. DMA-654X

Amendment No. 14

It is agreed this 6th day of July, 1956, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and Northwest Defense Minerals, Inc., Assignee, that Exploration Project Contract No. Idm-836, dated July 16, 1951, as amended, is further amended, effective as of January 1, 1956, as follows:

1. In completing the processing of, and analytical work on, samples pursuant to Amendment No. 13 of June 14, 1956, the Operator shall perform six chemical analyses for tin, columbium-tantalum, and tungsten, and six assays for gold of sampled concentrate fractions recovered from the lower two feet in Test Pit No. 1 on Beaver Creek. The cost for the analyses and for extra copies of analytical reports thereof shall not exceed $348.

2. In addition to the work performed pursuant to paragraph 1 above, the following work shall be done on one combined concentrate sample recovered from the remaining material excavated from Test Pit No. 1 on Beaver Creek and on one combined concentrate sample from each test pit and drill hole described in Exhibit "A" under Phase II of the Contract, as amended by Amendment No. 3 of October 28, 1953:

> Each such sample shall be analyzed chemically for tin, columbium-tantalum, and tungsten; the free gold shall be separated from the combined concentrate samples; and the separate values per cubic yard of all minerals analyzed and recovered shall be estimated. The sample from each hole and test pit shall not be mixed with the sample of any other hole or test pit.

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate total amount which the Government may be required to contribute, or the allowable maximum cost of any item of work.

IN WITNESS WHEREOF, the parties hereto have executed this agreement as of the day and year first above written.

THE UNITED STATES OF AMERICA

By C O Mittendorf
Administrator, Defense Minerals Exploration Administration

NORTHWEST DEFENSE MINERALS, INC.,
Assignee

Northwest Defense Minerals Inc

By

Title Peggy Keenan, Pres

Docket copy

Indrtg 6/7/56
"Appd. for Sig."

EXPLORATION PROJECT CONTRACT
NORTHWEST DEFENSE MINERALS, INC., Assignee
DOCKET NO. DMEA-434

AMENDMENT NO. 11

It is agreed this 11th day of June, 1956, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and Northwest Defense Minerals, Inc., Assignee, that Exploration Project Contract No. I4n-838 (Docket No. DMEA-434), dated July 16, 1951, as amended, is hereby further amended as follows:

The time for completion of the work specified in the Contract, as amended, is extended to October 1, 1956, but only for the purpose of completing the processing of, and analytical work on, the samples from test pits and drill holes completed prior to January 1, 1956.

This Amendment shall not be construed to increase the estimated total cost of the project, the aggregate total amount which the Government may be required to contribute, the allowable maximum cost of any item of work, or the agreed unit cost of any item of work.

THE UNITED STATES OF AMERICA

By O P Mittendorf
Administrator, Defense Minerals
Exploration Administration

NORTHWEST DEFENSE MINERALS, INC.

By Peggy Keenan

Title President

Rubin 2/15/56 Accepted

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EXPLORATION PROJECT CONTRACT
NORTHWEST DEFENSE MINERALS, INC.
DOCKET NO. DMEA 654X
CONTRACT NO. IDM-258

AMENDMENT NO. 12

It is agreed this 6th day of January, 1956, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Northwest Defense Minerals, Inc., hereinafter called the "Operator," parties to that certain Exploration Project Contract No. IDm-258, Docket No. DMEA 654X, dated July 16, 1951, hereinafter called the "Contract," that:

> In lieu of concentrating metals and minerals by the method referred to in paragraph "1" of "Amendment No. 8", and as set forth in the flow sheet referred to and attached to "Amendment No. 8," the metals and minerals will be concentrated as set forth in the flow sheet identified by the caption "Nov. 4, 1955, Northwest Defense Minerals, Phase II," which is attached hereto and made a part of this amendment. Except as herein provided, the provisions of paragraph "1" of "Amendment No. 8" shall remain in full force and effect.

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate total amount which the Government may be required to contribute, nor any item of allowable cost which is expressly designated "allowable maximum."

Executed in sextuplet the day and year first above written.

UNITED STATES OF AMERICA

By W. M. Traver
W. M. Traver
Executive Officer, DMEA
Field Team, Region III

NORTHWEST DEFENSE MINERALS, INC.

By Peggy Keenan President
Peggy Keenan, President

Apr 4 1955
Northwest Refining Minerals
Phase II

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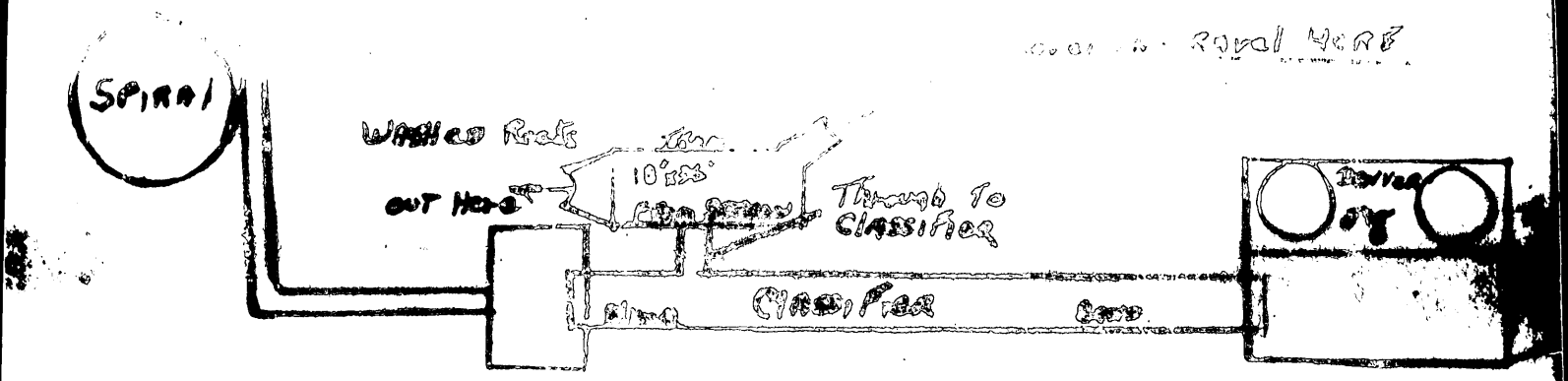
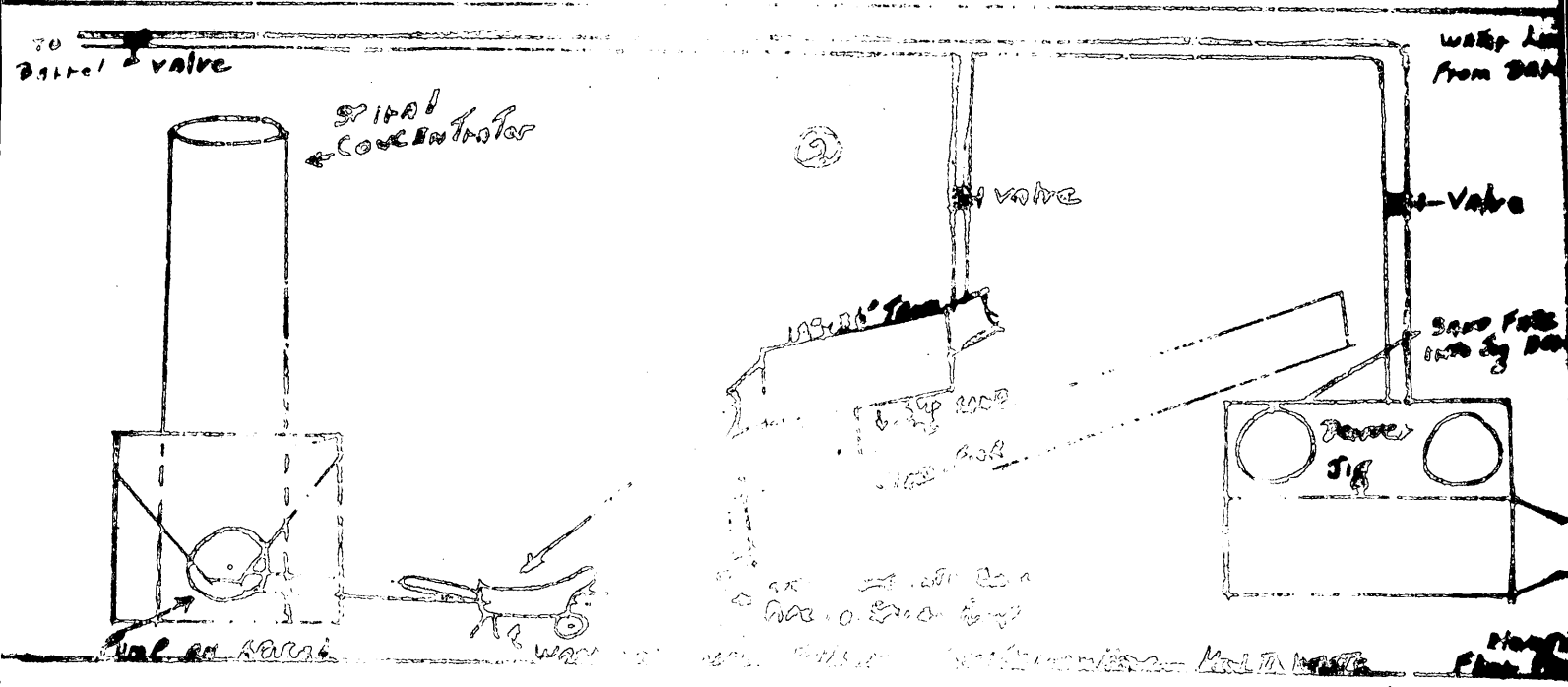
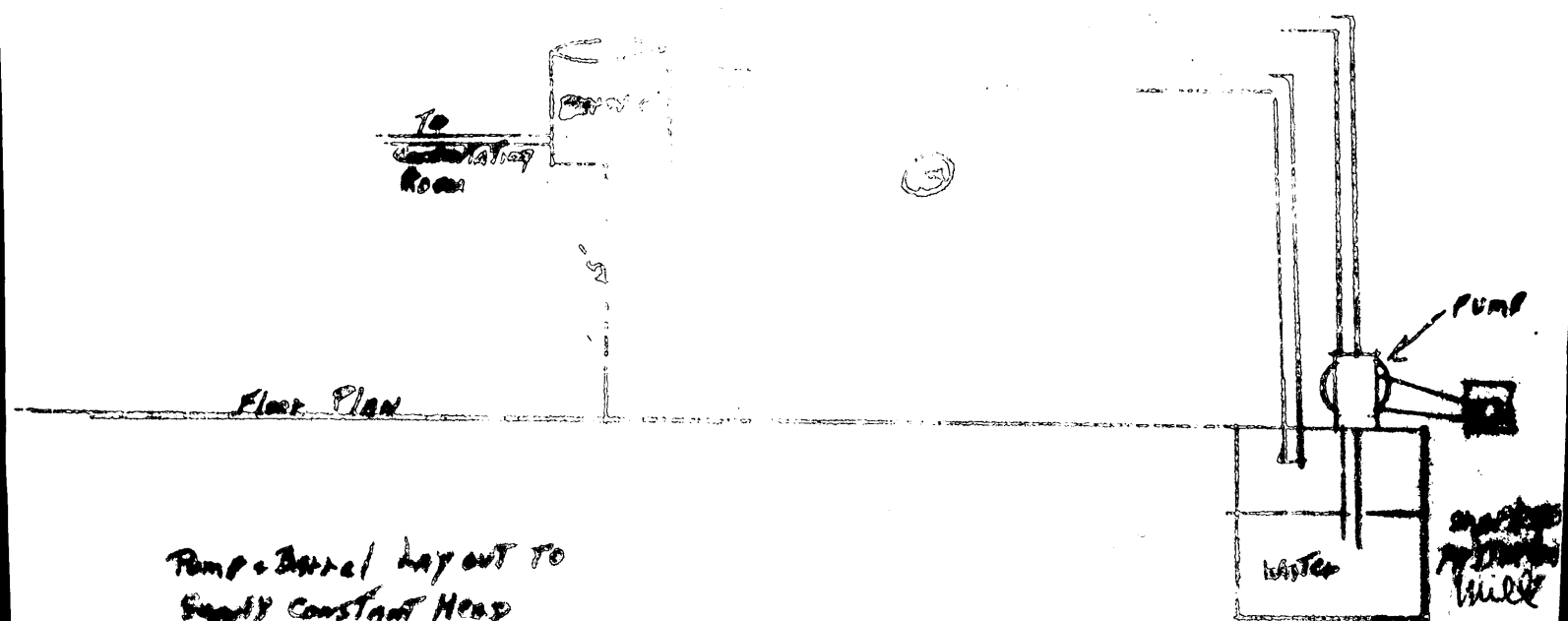
FEB - 3 1956

Royal Mine







Pump + Barrel Layout to
Supply Constant Head
Water Supply

Docket copy

AMENDMENT NO. 11
to
EXPLORATION PROJECT CONTRACT Idm-258 (DOCKET NO. DMRA-654)
between
THE UNITED STATES OF AMERICA
and
NORTHWEST DEFENSE MINERALS, INC. (Assignee)

It is agreed this 16th day of December, 1955, that Contract Idm-258 (Docket No. DMRA-654) as amended, is further amended effective as of September 22, 1955, as follows:

1. The Operator may elect to perform some or all of the work of sinking the 9 test pits authorized under Exhibit "A" attached to Amendment No. 3 dated October 28, 1952, either itself, or through independent contractors. The said work includes washing excavated material, concentrating contained tin, tantalum, columbium, tungsten, gold, and other minerals or metals, and separating the free gold from the concentrates.

2. Irrespective of whether the aforesaid work is done under independent contracts, or by the Operator itself, the maximum amount to which the Government will contribute shall be the actual cost, but not in excess of $25 per foot, for sinking not more than 9 test pits with a total footage of not more than 180 feet. The total maximum allowable cost for this work shall be $4,500.

3. The second paragraph of Item (1) under the heading "Estimated Costs of the Project," in Exhibit "A" attached to the aforesaid Amendment No. 3, is deleted.

4. No payment shall be made for any part of the aforesaid work on any test pit until the particular test pit shall have been completed.

5. The labor schedule for said work is waived.

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate total amount which the Government may be required to contribute, the allowable maximum cost of any item of work, or the agreed unit cost of any item of work.

IN WITNESS WHEREOF, these parties have executed this agreement as of the day and year first above written.

THE UNITED STATES OF AMERICA

By C. P. Mathewson
Administrator, Defense Minerals
Exploration Administration

NORTHWEST DEFENSE MINERALS, INC. (Assignee)

By Peggy Keenan
President

Docket Copy

AMENDMENT NO. 10
To
EXPLORATION PROJECT CONTRACT Idm-E58
(DOCKET NO. DMEA-654)
Between
UNITED STATES OF AMERICA
and
NORTHWEST DEFENSE MINERALS, INC. (ASSIGNEE)

It is agreed that Contract Idm-E58 (Docket No. DMEA-654) is amended as follows, effective September 1, 1955:

In Exhibit "A" which is attached to Amendment 3 of this contract, item (7) Miscellaneous under the heading Estimated Costs of the Project is amended by deleting the following:

"Meals and quarters - 687 days
@ $8.00*/day $5,496.00"

and substituting the following:

"Meals and quarters - 687 man days
@ $8.00*/day $5,496.00

"This item applies to the following working crew:

1 Supervising Engineer
1 Cook
1 Truck-driver-bullcook
1 Driller (churn drill)
1 Driller helper (churn drill)
1 Panner
3 Miners - shaft crew, part time

and includes all costs of the following: wages of cook (and helpers, if any); food; all necessary cooking supplies and utensils; cost of rental, or such proportion of the purchase price, of cooking equipment as may be allocable to work under this contract; and rental of housing, except that no rental will be allowed for buildings on the property."

RECEIVED
NOV 8 1955

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate total amount which the Government may be required to contribute, nor the agreed unit cost of any item of work.

Executed in sextuplicate this 22nd day of November, 1955.

THE UNITED STATES OF AMERICA

By Frank E. Johnson
Administrator, Defense
Minerals Exploration
Administration

NORTHWEST DEFENSE MINERALS, INC.

By Jack Keenan

Title President

Indrtg
Appd. Sol. Off."
J H Krome
Ellis
Talbert
Selfridge

Docket copy

Ellis

EXPLORATION PROJECT CONTRACT
NORTHWEST DEFENSE MINERALS, INC., ASSIGNEE
DOCKET NO. DMA-634X

AMENDMENT NO. 9

It is agreed this 22nd day of September, 1955, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Northwest Defense Minerals, Inc., Assignee, hereinafter called the "Operator," parties to that certain Exploration Project Contract Idm-838, Docket No. DMA-634X, dated July 16, 1951, as amended, hereinafter called the "Contract," that:

1. (a) Work under the Contract shall be suspended during the period beginning as of the day after Phase I of the work was completed and ending not later than November 1, 1955.

(b) No costs incurred by the Operator during the period of suspension shall be allowable for contribution by the Government, and the Government shall not contribute to any costs of rehabilitation or repair which, in its opinion, would not have occurred if there had been no suspension of the work.

(c) The Operator at his own cost and expense, without contribution by the Government, during the period of suspension shall preserve and protect the project work and any property in which the Government has an interest.

2. The time fixed for the completion of the work is further extended from October 1, 1955, to January 1, 1956, except that if all work other than the analytical and metallurgical work is completed by January 1, 1956, the Government may grant a further extension of time for the sole purpose of completing the analytical and metallurgical work.

3. In Annex II to Amendment No. 8, the period for payment of the Government's percentage royalty is extended from "fourteen years" to "fifteen years."

4. It is of the essence of this Contract that the work be resumed before the termination of the period here

fixed for suspension, and if it is not so resumed:

(a) The Government shall contribute only to the costs of the work performed under Phase I; and all obligations of the parties under the Contract, except as otherwise provided under this Paragraph 4, shall be and are hereby terminated.

(b) The Operator shall promptly perform all winding-up and settlement actions provided for in the Contract, including the rendering of the final report and final account; and the Government shall contribute its share of the reasonable costs of said work.

(c) All rights of the Government provided for in the Contract with respect to certification of discovery or development, and percentage royalty and lien for its payment are preserved.

5. It is of the essence of this Contract that the work be completed by January 1, 1956, except as otherwise provided in Paragraph 2 respecting the analytical and metallurgical work; and if it is not so completed, in the manner required by the Contract, the following provisions shall thereupon become effective:

(a) The Government shall contribute only to the costs of the work performed under Phase I, and to the costs of work performed under Phase II prior to January 1, 1956, plus the costs of any analytical and metallurgical work the Government may approve for performance thereafter.

(b) All rights of the Government provided for in the Contract with respect to certification of discovery or development, and a percentage royalty and lien for its payment are preserved.

(c) The Operator hereby releases and agrees to save the Government harmless from all claims or demands under or arising out of the Contract, except as otherwise provided in this amendment.

6. This agreement shall not be construed to increase the estimated total cost of the project nor the aggregate

Docket copy

EXPLORATION PROJECT CONTRACT
KEENAN PROPERTIES
DOCKET NO. DMA-654X

AMENDMENT NO. 8

It is agreed this 29th day of November, 1954, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Peggy Keenan, doing business as Keenan Properties, hereinafter called the "Operator," that Exploration Project Contract Idm-658 (Docket No. DMA-654X), dated July 16, 1951, as amended, hereinafter called the "Contract," is further amended, effective October 28, 1952, as follows:

1. As an alternative to the method of recovering and concentrating metals and minerals as outlined in the first two paragraphs on page 2 under the heading "General Conditions" in Exhibit "A" (Amendment) in Amendment No. 3, the Operator may recover and concentrate metals and minerals by the method set forth in the attached flow sheet entitled "Keenan Properties Test Flow Sheet, March 22nd, 1954, outlined by G. W. Jarman." No cost of equipment, whether by purchase, rental, or otherwise, or materials, involved in this alternative test flow sheet which are not already provided for in the Exhibit "A" (Amendment) in Amendment No. 3, shall be allowable costs of the Contract, but shall be borne solely by the Operator without contribution by the Government.

2. Annex I attached to Amendment No. 6 is cancelled, and Annex II attached hereto and made a part hereof is substituted for the provisions of Article 15 of the Contract form.

3. In Article 3 of the Contract form, delete the period "prior to November 1, 1954," provided by Amendment No. 7, and substitute the period "prior to October 1, 1955."

4. Leased mining claims are added to the land referred to in Article 2 of the Contract, and the Owner's Consents to Lien covering the land (in lieu of Landlord's Subordination Agreements) are attached hereto, as follows:

Homeward Bound Claim 4

Homeward Bound Fraction 4

Golden Star 4

Ferret Nos. 2, 3, and 5 4

Boston No. 5 4

MS-393

Exhibit Handwriting 1-8

+ Appendix I

This amendment shall not be construed to increase the estimated total cost of the project nor the aggregate total amount which the Government may be required to contribute.

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C P Mittendorf
Administrator, Defense Minerals
Exploration Administration

KEENAN PROPERTIES

Keenan Properties

By Jaggy Keenan

Witnesses:
H P Blum
Ellis
Chamberlin
Selfridge
J E Johnson

EXPLORATION PROJECT CONTRACT
KEENAN PROPERTIES
DOCKET NO. DM1-654X

ANNEX II

The following provisions are in lieu of Article 16 :

Repayment by Operator.--a. Certification.--If the Government considers that a discovery or development from which production may be made has resulted from the work, the Government, at any time not later than six months after the Operator has rendered the final report and final account, may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development.

b. Royalty on production.--The Operator, as principal, if the Operator is the producer, or as surety, if the Operator is not the producer, shall pay to the Government a royalty on all minerals mined or produced from the land, as follows: (1) regardless of any certification of discovery or development, from the date of the contract until the lapse of the time within which the Government may make such certification, or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first; or (2) if the Government makes a certification of discovery or development, for a period of ten years* from the date of the contract, or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first.

c. Basis for computation.--The Government's royalty shall be a percentage of the gross proceeds (including any bonuses, premiums, allowances, or other benefits) from the production sold, in the form sold (ore, concentrates, metal, or equivalent), at the point of delivery (the f.o.b. point); except, that charges of the buyer arising in the regular course of business, and shown as deductions on the buyer's settlement sheets, on account of the cost of treatment processes performed by the buyer, sampling and assaying to determine the value of the production sold, and freight paid by the buyer to a carrier (not the Operator), shall be allowed as deductions in arriving at the "gross proceeds" as that term is used herein. Any costs of treatment processes, sampling or assaying, or transportation, performed or paid by the

* The period "fourteen years" is substituted for the period "ten years".
The word "land" refers to the land described in Article 2 of the Contract form.

Operator or by anyone other than the buyer, are not deductible in arriving at the "gross proceeds" as that term is here used. The term "treatment processes," as here used, means those processes (such as milling, concentrating, smelting, refining, or equivalent) applied to the raw ore or other production after it is extracted from the ground, to put it into a commercially marketable form; excluding fabricating or manufacturing.

d. Unsold production.--If any production (ore, concentrates, metal, or equivalent), after the lapse of six months from the date the ore was extracted from the ground, remains neither sold nor used by the Operator in integrated manufacturing or fabricating operations (for instance, if it is stockpiled), the Government, at its option, as long as it so remains, may require the computation and payment of its royalty on the value of such production in the form (ore, concentrates, metal, or equivalent) it is in when the Government elects to require computation and payment. If any production is used by the Operator in integrated manufacturing or fabricating operations before the Government makes its election, the Government's royalty on such production shall be computed on the value thereof in the form in which and at the time when it is so used. "Value" as here used means what is or would be gross income from mining operations for percentage depletion purposes in Federal income tax determination, or the market value, whichever is greater.

e. Percentages of royalty.--The percentages of the Government's royalty shall be as follows:

> One and one-half ($1\frac{1}{2}$) percent of amounts ("gross proceeds" or "value") not in excess of eight dollars ($8.00) per ton of production in the form in which sold, held, or used, plus one-half ($\frac{1}{2}$) percent for each additional full fifty cents ($0.50) by which such amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such amounts.
>
> (For instance: the royalty on an amount of five dollars ($5.00) per ton, would be one and one-half ($1\frac{1}{2}$) percent; on an amount of ten dollars ($10.00) per ton, three and one-half ($3\frac{1}{2}$) percent.)

f. Lien for payment.--To secure the payment of its percentage royalty, there is hereby granted to the Government a lien upon the land or the Operator's interest in the land and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

g. Notice to purchasers.--The Operator shall give notice of the Government's claim for royalty to any purchaser of the production, and shall authorize and direct such purchaser to pay the royalty directly to the Government and to furnish the Government with copies of the settlement sheets. If the records of any production and sales or other disposition of production, whether the production is by the Operator or by others, are not made available to the Government, the amount of the royalty may be estimated by the Administrator, Defense Minerals Exploration Administration, or his successor, and his estimate thereof shall be final and binding upon the Operator.

h. No obligation to produce.--Nothing in this contract is to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

i. Government not obligated to buy.--Nothing in this contract shall be construed as imposing any obligation on the Government to purchase any minerals mined or produced from the land.

KIMRAN PROPERTIES TEST FLOW SHEET. MARCH 22nd, 1954.

Outlined by G.W. Jarman.

			WT
		Hopper (KP)	
		Water ——— ½" Overstrom Step Screen	
$1,000	1 HP	Will handle 2 tons per hr in-feed. — 1" + 1" to waste	1,000 lbs
500.	½ HP	— 1" + ½" to Picking Belt	1,000 lbs
		—½"	
		Dryer (KP)	
800.	½ HP	Richmond Gyro Whip Screen	500 lbs
550.	½ HP	S.Sch.B. V-80 Whippet	200 lbs
		Lights to waste — Heavies	
1,100.	½ HP	Carpco Magnetic Separator	600 lbs
2,800.	½ HP	Carpco Electrostatic Separator	1,000 lbs
$ 6,550.	5½ HP		

Note: Requires 5 HP Engine Generator Set, sing phase 60 cycle, 110 V. (Rental)

LEGEND OF THE SEPARATION PROCESS

KIMRAN PROPERTIES, MARCH 22.1954.

Outlined by G.W.Jarman.

Richmond Gyro Whip Screen (Dry)

Each screen size successively

V-80 Whippet

Lights to waste — Heavies — 3.50 sp.gr.

Carpco Magnetic separator

Magnetic

1st pass. Magnetite to waste

2nd pass. Garnet, Ilmenite, Hornblende, (back to table) etc.

3rd.pass. Monazite sands.

Non-Magnetic

Zircon
Rutile, Scheelite
Columbium-tantalum
Gold, Cassiterite

Carpco Electrostatic Separator

Conductors

Rutile, Columbium-Tantalum, Cassiterite, (back to table) etc.

Non-Conductors

Gold, Scheelite, Zircon. (back to table) etc.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 28 1954

MF-203
(Revised July 1, 1954)

OWNER'S CONSENT TO LIEN

WHEREAS, the undersigned, as owner, [redacted] has an interest in certain property in the State of South Dakota, County of [redacted], described as follows:1/

[redacted]

which is the subject of a proposed exploration project contract, hereinafter called the "contract", between the United States of America, hereinafter called the "Government", and

2/ [redacted]

hereinafter called the "Operator"; and

WHEREAS, under the provisions of said contract the Government is entitled to a percentage royalty on production and to other rights and equities which do or may conflict with or be adverse to the rights of the undersigned:

NOW THEREFORE, the undersigned, in consideration of said contract and as an inducement to the Government to enter into same, undertakes and agrees as follows:

1. The Government's equity in and right to dismantle, sever, take possession of, and remove and dispose of facilities, buildings, fixtures, equipment, or other items as provided in the contract or any amendment thereof shall prevail over and be prior and superior to any conflicting or adverse rights of the undersigned, and the Government is authorized to enter upon the land for such purposes.

2. To secure the payment to the Government of the percentage royalty on production3/ provided for under the terms of said exploration project contract or any amendment thereof there is hereby granted to the Government a lien upon the land above referred to and upon any production of minerals therefrom until said royalty is fully paid or ten years have elapsed from the date of the contract, whichever occurs first.

1/ Either (a) insert the legal description of the land, or (b) strike out the words "as follows" and insert "in a lease [or contract, deed, or other document] dated _____, and recorded in book _____ page _____ official records of said county." If (b) is used, the book and page of recordation cannot be dispensed with. If the space provided is insufficient, use an Annex, and refer to the Annex in the space.

2/ Insert the name of the Operator as it will appear in the exploration project contract.

3/ Mining or production from the land is not required, and in the absence of production there is no obligation to repay the Government.

(OVER)

3. The undersigned shall commit no act nor assert any claim that may contravene or conflict with the lien, claim, or rights of the Government under the provisions of said contract. This agreement shall be binding upon the heirs, executors, administrators, successors, and assigns of the undersigned.

4. Changes and added provisions _____

_____

_____

_____

Dated this 27th day of September, 1951.

_____ [Seal]
[illegible], President

Northwest Defense Minerals Inc. [Seal]

_____ [Seal]
John F. [illegible], Secretary

MF-203
(Revised July 1, 1954)

OWNER'S CONSENT TO LIEN

WHEREAS, the undersigned, as owner, co-owner, lessor, or seller has an interest in certain property in the State of South Dakota, County of Lawrence, described as follows:1/

Gamer's Ground property, placer gravels covered by claims Union 7, Union, Union 2,5; Doctor 5 (M.S. 1707) and M.S. 372 (Beaver Creek); Lease dated November 1, 1949 - unrecorded. Included in Gamers Ground are Elizabeths 7,8,9,10,11,12,13,14.

which is the subject of a proposed exploration project contract, hereinafter called the "contract", between the United States of America, hereinafter called the "Government", and

2/ [illegible] d/b/a [illegible]
[illegible] South Dakota

hereinafter called the "Operator"; and

WHEREAS, under the provisions of said contract the Government is entitled to a percentage royalty on production and to other rights and equities which do or may conflict with or be adverse to the rights of the undersigned:

NOW THEREFORE, the undersigned, in consideration of said contract and as an inducement to the Government to enter into same, undertakes and agrees as follows:

1. The Government's equity in and right to dismantle, sever, take possession of, and remove and dispose of facilities, buildings, fixtures, equipment, or other items as provided in the contract or any amendment thereof shall prevail over and be prior and superior to any conflicting or adverse rights of the undersigned, and the Government is authorized to enter upon the land for such purposes.

2. To secure the payment to the Government of the percentage royalty on production3/ provided for under the terms of said exploration project contract or any amendment thereof there is hereby granted to the Government a lien upon the land above referred to and upon any production of minerals therefrom until said royalty is fully paid or ten years have elapsed from the date of the contract, whichever occurs first.

1/ Either (a) insert the legal description of the land, or (b) strike out the words "as follows" and insert "in a lease [or contract, deed, or other document] dated _____, and recorded in book _____ page _____ official records of said county." If (b) is used, the book and page of recordation cannot be dispensed with. If the space provided is insufficient, use an Annex, and refer to the Annex in the space.

2/ Insert the name of the Operator as it will appear in the exploration project contract.

3/ Mining or production from the land is not required, and in the absence of production there is no obligation to repay the Government.

(OVER)

3. The undersigned shall commit no act nor assert any claim that may contravene or conflict with the lien, claim, or rights of the Government under the provisions of said contract. This agreement shall be binding upon the heirs, executors, administrators, successors, and assigns of the undersigned.

4. Changes and added provisions _____

_____

_____

_____

Dated this 26th day of July, 1954.

W. O. Fillingim [Seal]

William G. Fillingim [Seal]

_____ [Seal]

MF-203
(Revised July 1, 1954)

OWNER'S CONSENT TO LIEN

WHEREAS, the undersigned, as owner, co-owner, lessor, or seller has an interest in certain property in the State of South Dakota, County of Lawrence, described as follows:1/ W.O. Pillsbury properties, placer deposits covered by claims as follows: Mayflowers 1,2,3,4; Terret 2,3,5; Lala, Lady 2; Belmont, Belmont 1,2,3,4 and the W.O. Pillsbury Extension Fractions, Fractions 1-8 (incl.) located on the north by U.S. 392, as described in deposition appurtenant to loans dated 9-3-42, unrecorded.

which is the subject of a proposed exploration project contract, hereinafter called the "contract", between the United States of America, hereinafter called the "Government", and

2/ [illegible] d/b/a [illegible]
[illegible] SOUTH DAKOTA

hereinafter called the "Operator"; and

WHEREAS, under the provisions of said contract the Government is entitled to a percentage royalty on production and to other rights and equities which do or may conflict with or be adverse to the rights of the undersigned:

NOW THEREFORE, the undersigned, in consideration of said contract and as an inducement to the Government to enter into same, undertakes and agrees as follows:

1. The Government's equity in and right to dismantle, sever, take possession of, and remove and dispose of facilities, buildings, fixtures, equipment, or other items as provided in the contract or any amendment thereof shall prevail over and be prior and superior to any conflicting or adverse rights of the undersigned, and the Government is authorized to enter upon the land for such purposes.

2. To secure the payment to the Government of the percentage royalty on production3/ provided for under the terms of said exploration project contract or any amendment thereof there is hereby granted to the Government a lien upon the land above referred to and upon any production of minerals therefrom until said royalty is fully paid or ten years have elapsed from the date of the contract, whichever occurs first.

1/ Either (a) insert the legal description of the land, or (b) strike out the words "as follows" and insert "in a lease [or contract, deed, or other document] dated _____, and recorded in book _____ page _____ official records of said county." If (b) is used, the book and page of recordation cannot be dispensed with. If the space provided is insufficient, use an Annex, and refer to the Annex in the space.

2/ Insert the name of the Operator as it will appear in the exploration project contract.

3/ Mining or production from the land is not required, and in the absence of production there is no obligation to repay the Government.

(OVER)

3. The undersigned shall commit no act nor assert any claim that may contravene or conflict with the lien, claim, or rights of the Government under the provisions of said contract. This agreement shall be binding upon the heirs, executors, administrators, successors, and assigns of the undersigned.

4. Changes and added provisions _____

_____

_____

_____

Dated this 20th day of July, 1954.

✓ [illegible] [Seal]

_____ [Seal]

_____ [Seal]

Minerals Administration
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SEP 20 1954

MF-203
(Revised July 1, 1954)

OWNER'S CONSENT TO LIEN

WHEREAS, the undersigned, as owner, ~~co-owner~~, lessor, or ~~lessee~~ has an interest in certain property in the State of South Dakota, County of Lawrence, described as follows:1/

Placer Claim Lot No. 393 in Rawlins District as per patent recorded August 20, 1898 at 3:00 O'Clock P.M in Book 139 Page 14 in the Lawrence County Court House, Deadwood, South Dakota. The above containing 138.27 acres according to the survey thereof.

which is the subject of a proposed exploration project contract, hereinafter called the "contract", between the United States of America, hereinafter called the "Government", and

2/ NORTHWEST DEFENSE MINERALS, INCORPORATED,
2101 S. STREET, NORTH WEST.
WASHINGTON, D.C (A Delaware Corporation).

hereinafter called the "Operator"; and

WHEREAS, under the provisions of said contract the Government is entitled to a percentage royalty on production and to other rights and equities which do or may conflict with or be adverse to the rights of the undersigned:

NOW THEREFORE, the undersigned, in consideration of said contract and as an inducement to the Government to enter into same, undertakes and agrees as follows:

1. The Government's equity in and right to dismantle, sever, take possession of, and remove and dispose of facilities, buildings, fixtures, equipment, or other items as provided in the contract or any amendment thereof shall prevail over and be prior and superior to any conflicting or adverse rights of the undersigned, and the Government is authorized to enter upon the land for such purposes.

2. To secure the payment to the Government of the percentage royalty on production3/ provided for under the terms of said exploration project contract or any amendment thereof there is hereby granted to the Government a lien upon the land above referred to and upon any production of minerals therefrom until said royalty is fully paid or ten years have elapsed from the date of the contract, whichever occurs first.

1/ Either (a) insert the legal description of the land, or (b) strike out the words "as follows" and insert "in a lease [or contract, deed, or other document] dated _____, and recorded in book _____ page _____ official records of said county." If (b) is used, the book and page of recordation cannot be dispensed with. If the space provided is insufficient, use an Annex, and refer to the Annex in the space.

2/ Insert the name of the Operator as it will appear in the exploration project contract.

3/ Mining or production from the land is not required, and in the absence of production there is no obligation to repay the Government.

(OVER)

3. The undersigned shall commit no act nor assert any claim that may contravene or conflict with the lien, claim, or rights of the Government under the provisions of said contract. This agreement shall be binding upon the heirs, executors, administrators, successors, and assigns of the undersigned.

4. Changes and added provisions _____

_____

_____

_____

Dated this 26 day of August, 1954.

BLACK HILLS TIN COMPANY, [Seal]

By- Ray B Beatty President [Seal]

_____ [Seal]

MF-203
(Revised July 1, 1954)

OWNER'S CONSENT TO LIEN

WHEREAS, the undersigned, as owner, co-owner, lessor, or seller has an interest in certain property in the State of South Dakota, County of Lawrence, described as follows:1/

Oma Oma Fraction (MS1879) and Golden Star and Golden Star No. 2 (MS1879) and the Homeward Bound claims controlled by a lease between Dakota Tin and Gold Co., Spearfish, South Dakota and Peggy Keenan, Spearfish, South Dakota, dated July 17, 1950 unrecorded,

which is the subject of a proposed exploration project contract, hereinafter called the "contract", between the United States of America, hereinafter called the "Government", and

2/ Peggy Keenan, d/b/a Keenan Properties, Spearfish, South Dakota,

hereinafter called the "Operator"; and

WHEREAS, under the provisions of said contract the Government is entitled to a percentage royalty on production and to other rights and equities which do or may conflict with or be adverse to the rights of the undersigned:

NOW THEREFORE, the undersigned, in consideration of said contract and as an inducement to the Government to enter into same, undertakes and agrees as follows:

1. The Government's equity in and right to dismantle, sever, take possession of, and remove and dispose of facilities, buildings, fixtures, equipment, or other items as provided in the contract or any amendment thereof shall prevail over and be prior and superior to any conflicting or adverse rights of the undersigned, and the Government is authorized to enter upon the land for such purposes.

2. To secure the payment to the Government of the percentage royalty on production3/ provided for under the terms of said exploration project contract or any amendment thereof there is hereby granted to the Government a lien upon the land above referred to and upon any production of minerals therefrom until said royalty is fully paid or ten years have elapsed from the date of the contract, whichever occurs first.

1/ Either (a) insert the legal description of the land, or (b) strike out the words "as follows" and insert "in a lease [or contract, deed, or other document] dated _____, and recorded in book _____ page _____ official records of said county." If (b) is used, the book and page of recordation cannot be dispensed with. If the space provided is insufficient, use an Annex, and refer to the Annex in the space.

2/ Insert the name of the Operator as it will appear in the exploration project contract.

3/ Mining or production from the land is not required, and in the absence of production there is no obligation to repay the Government.

(OVER)

3. The undersigned shall commit no act nor assert any claim that may contravene or conflict with the lien, claim, or rights of the Government under the provisions of said contract. This agreement shall be binding upon the heirs, executors, administrators, successors, and assigns of the undersigned.

4. Changes and added provisions _____

Dated this 29th day of October, 1954.

Dakota Tin & Gold Co [Seal]

By Lillian G. Fillmore, Secty [Seal]

_____ [Seal]

Docke[illegible]y

EXPLORATION PROJECT CONTRACT
KEENAN PROPERTIES
DOCKET NO. [illegible]

AMENDMENT NO. 7

It is agreed this 10th day of May, 1954, between the United States of AMERICA, acting through the Department of the Interior, Defense Minerals Exploration Administration, and Peggy Keenan, doing business as Keenan Properties, the Exploration Project Contract IDM-358 (Docket No. [illegible]) dated July 16, 1951, as amended, is further amended, effective October 26, 1953, as follows:

1. In Article 3 of the contract form, delete the period "prior to June 30, 1954," provided by Amendment No. 6, and substitute the period "prior to November 1, 1954."

2. In Annex I attached to Amendment No. 6, delete the period "eleven years" and substitute the period "twelve years."

This amendment shall not be construed to increase the estimated total cost of the project nor the aggregate total amount which the Government may be required to contribute.

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C. Mitteebery
Administrator, Defense Minerals Exploration Administration

Boston Hoffberg
Chemlex

KEENAN PROPERTIES

By Peggy Keenan

d/b/a Keenan Properties

Division Copy

EXPLORATION PROJECT CONTRACT
KEENAN PROPERTIES
DOCKET NO. DMA-654X

AMENDMENT NO. 6

It is agreed this 26th day of October, 1953, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and Peggy Keenan, doing business as Keenan Properties, each acting in consideration of the agreement of the other to the terms hereinafter set forth, that Exploration Project Contract Idm-553, Docket No. DMA-654X, dated July 16, 1951, as amended, between the parties hereto, be further modified and amended as follows:

1. In Article 3 of the contract form, the words "30 days (Phase 1)" are deleted and substituted therefor are the words "prior to June 30, 1954."

2. In lieu of Article 15 of the contract form, the provisions of Annex I attached hereto and made a part hereof are substituted.

This amendment shall not be construed to increase the estimated total cost of the project nor the aggregate amount which the Government may be required to contribute.

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By O. Meitzendorf
Administrator, Defense
Minerals Exploration
Administration

Robin Chandler

KEENAN PROPERTIES

By Peggy Keenan
Peggy Keenan

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
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ANNEX I

The following provisions are in lieu of Article 23:

Repayment by Operator.--a. Certification.--If at any time the Government considers that a discovery or development from which production may be made has resulted from the exploration work, the Government, at any time not later than six months after the Operator has rendered the final report and final account, may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development.

b. Percentage royalty.--The Operator, or his successor in interest, shall pay to the Government a royalty on all minerals mined or produced from the land described in Article 2,--(1) regardless of any certification of discovery or development, from the date of the contract until the lapse of the time within which the Government may make such certification of discovery or development, or until the total net amount contributed by the Government, without interest, is fully repaid, whichever occurs first, unless the Government waives its right to a royalty; or (2) if the Government makes a certification of discovery or development, for a period of ten years* (or other period fixed by this contract) from the date of the contract, or until the total net amount contributed by the Government, without interest, is fully repaid, whichever occurs first. Said royalty shall be a percentage of the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production (including any bonuses), in whatever form disposed of, including ore, concentrates, or metal, as follows:

(a) One and one-half ($1\frac{1}{2}$) per cent of any such net amounts not in excess of eight dollars ($8.00) per ton.

(b) One and one-half ($1\frac{1}{2}$) per cent of any such net amounts, plus one-half ($\frac{1}{2}$) per cent of such net amounts for each additional full fifty cents ($0.50) by which such net amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) per cent of such net amounts.

(For instance: the percentage royalty on a net amount of five dollars ($5.00) per ton, would be one and one-half ($1\frac{1}{2}$) per cent; on a net amount of ten dollars ($10.00) per ton, three and one-half ($3\frac{1}{2}$) per cent.)

c. Definitions.--As here used, "net smelter returns", "net concentrator returns", and "other net amounts realized from the sale or other disposition", mean gross revenue from sales; or if not sold, the market value of the material after it is mined in the form in which and the place where it is held. In the case of integrated operations in which the material is not disposed of as such, these terms mean what is or would be gross income from mining operations for percentage depletion purposes in income tax determination.

d. Lien for Payment.--To secure the payment of its percentage royalty, the Government shall have and is hereby granted a lien upon the land described in Article 2 and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

e. Notice to Purchasers.--The Operator shall notify any purchaser of the production of the Government's royalty interest, and shall authorize and direct the purchaser to pay the royalty directly to the Government and to furnish the Government with copies of the settlement sheets; but failure or refusal by the purchaser to comply shall not relieve the Operator of liability to pay any royalty falling due.

f. No Obligation to Produce.--This article is not to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

* The period [illegible] years is substituted for the period [illegible] years.

a Stone
6/12/53
Public

AMENDMENT NO. 5

Docket DMEA 654x, Contract Idm 5-58, dated July 16, 1951, between the United States of America and Keenan Properties is amended to read as follows:

1. Completion date of phase 2 is extended to October 15, 1953.

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate total, or the percentage of costs which the Government may pay under the provisions of Article 13 of contract form.

Dated: May 26, 1953

UNITED STATES OF AMERICA

By: A. B. Needham
A. B. Needham, Executive Officer
Field Team, Region V

PEGGY KEENAN d/b/a KEENAN PROPERTIES

By: Peggy Keenan

Docket Copy

AMENDMENT NO. 4

Docket DMEA 65Mx, Contract Idm-458, dated July 16, 1951, between the United States of America and Keenan Properties is amended to read as follows:

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3/10/53
Rubin

1. Completion date of phase 2 is extended to July 1, 1953.

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate total, or the percentage of costs which the Government may pay under the provisions of Article 13 of contract form.

Dated: February 16, 1953

UNITED STATES OF AMERICA

By: A. B. Needham

A. B. Needham, Executive Officer
Field Team, Region V

PEGGY KEENAN d/b/a KEENAN PROPERTIES

By: Peggy Keenan

APPROVED

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 2 1953

Docket Copy

EXPLORATION PROJECT CONTRACT
PEGGY KEENAN d/b/a KEENAN PROPERTIES
DOCKET NO. DMA-654X
CONTRACT Idm-E58

AMENDMENT NO. 3

WHEREAS, the parties to this agreement are also the parties to Contract No. Idm-E58, Docket No. DMEA-654, executed on contract form NF-200 (June 1951), effective July 16, 1951, and amended twice; and

WHEREAS, the work under Phase I of the contract has been fully performed, and it is desired to define the work and estimate the costs under Phase II of the project which were provided for but unspecified at the time the contract was executed; and

WHEREAS, it is necessary to add land to Article 2 in order to perform the work under Phase II;

NOW, THEREFORE, it is agreed as follows:

1. Leased land is added to Article 2, and the Owner's Consents to Lien (in lieu of Landlord's Subordination Agreements) covering them, and attached hereto, are also included in Article 2. The land is as follows:

70 Flats Placer on Bear Creek (M.S. 393); and

Harkness, Harkness No. 1 - Harkness No. 9, inclusive, on Beaver Creek (known as the W. O. Fillmore Extension); all located in Lawrence County, South Dakota. See also map identified as "KP-A", attached hereto and included in Article 2.

2. The description of the work to be performed under Phase II and the estimated costs of performing it, are contained in Exhibit "A" (Amendment); attached hereto and made a part of the contract.

3. Article 3 is amended by deleting the words "within a period of 30 days (Phase I)," and substituting therefor the words "prior to March 1, 1953."

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate total amount which the Government may pay, or the percentage of the costs which the Government may pay, under the provisions of Article 13 of the contract form.

Dated October 28, 1952.

THE UNITED STATES OF AMERICA

By C O Mitteudorf
Administrator, Defense Minerals
Exploration Administration

Chambers
Robin Hoffman

PEGGY KEENAN d/b/a KEENAN PROPERTIES

By Peggy Keenan d/b/a Keenan Properties

EXPLORATION PROJECT CONTRACT
PEGGY KEENAN d/b/a KEENAN PROPERTIES
DOCKET NO. DMA-654X
CONTRACT Idm-E58

EXHIBIT "A" (AMENDMENT)

Description of the Work

Phase II

Explore with churn drill holes and test pits, the placer mining claims in the following areas:

Bear Creek

Seventy Flats Placer 393.

Beaver Creek

Placer 392; and Upper Beaver Creek, "W. O. Fillmore Extension", contiguous to Placer 392.

The work to be done consists of the following:

Bear Creek

One line of churn drill holes shall be drilled across the creek channel within 1500 feet of the South boundary of the property, where the boundary crosses Bear Creek. There shall be drilled not to exceed nine (9) holes of an approximate average depth of 20 feet each (or an approximate aggregate total of 180 feet of hole). The spacing between holes shall be approximately 50 feet.

If, in the opinion of the Government, the results obtained from this work justify additional exploration of this area, then, if approved in advance by the Government, a part or all of three (3) additional lines of holes shall be drilled at intervals of 1500 feet across the creek channel, according to the specifications for the original line of holes, (not exceeding a total of 27 holes with an approximate aggregate total of 540 feet). The values in each line of holes shall be checked by one test pit of an approximate depth of 20 feet (or a total of 4 test pits with an approximate aggregate total depth of 80 feet).

Beaver Creek

One line of churn drill holes shall be drilled across the creek channel immediately below the confluence of Potato, West Deer and Beaver Creeks, not to exceed nine (9) holes of an approximate average depth of 20 feet each (or an approximate aggregate total of 180 feet of drill hole). The spacing between the holes shall be approximately 50 feet.

If, in the opinion of the Government, the results obtained from this work justify additional exploration of this area, then a part or all of four (4) additional lines of holes shall be drilled, if approved in advance by the Government, according to the specifications for the original line of holes. One line may be located across the creek channel up Beaver Creek from the first line of holes. The other three lines of holes may be drilled down the Creek and across the channel at intervals of not less than 2000 feet measured starting from the first line of holes. The values in each line of holes shall be checked by one test pit of an approximate depth of 20 feet (or a total of five test pits with an approximate aggregate total depth of 100 feet).

General Conditions

Each drill hole shall be cased, shall be 6 inches in diameter, and shall be drilled to a depth in the bedrock to where the enriched mineral values are recovered. All material recovered from each drill hole shall be thoroughly washed. The contained tin, tantalum, columbium, tungsten, gold, and other minerals or metals shall be concentrated by panning and the free gold values separated and estimated as value per cu. yd. The remaining concentrate is to be split into two equal samples, one of which shall be retained by the Supervising Engineer and analyzed by a Government approved laboratory for tin, tungsten, tantalum and columbium. The other sample shall be delivered to the Government.

The test pits shall be sunk by using a caisson lining having a beginning diameter of not less than 48", and the caisson shall be continuously advanced ahead of the material being excavated. Each pit shall be sunk into the bedrock to where the enriched mineral values are recovered. All of the excavated material from each separate pit is to

be thoroughly washed by a trommel screen having 3/8" holes, and the fines containing tin, columbium, tantalum, tungsten, gold, and other minerals or metals shall be concentrated by a rougher and cleaner jig unit and a Wilfey type table. From the concentrate produced, the free gold shall be removed and the estimated value per cu. yd. determined. The remaining concentrate shall be split into two equal samples. One sample shall be retained by the supervising engineer and analyzed by a Government approved laboratory for tin, tungsten, tantalum and columbium. The other sample shall be delivered to the Government.

A Supervising Engineer, approved by the Government, will direct this entire exploration program and will prepare all reports required under the contract.

The Supervising Engineer shall select the location of the drill holes and test pits. However, before performing any work, prior Government approval must be obtained.

Estimated Costs of the Project
(*Indicates allowable maximum amount to which the Government will contribute)

(1) Independent Contracts

80* churn drill holes, 1600 feet* @ $5.50/ft.*, includes washing the drill cuttings, and concentrating the contained tin, tantalum, columbium, tungsten, gold, and other minerals or metals, and separating the free gold from the concentrates	$ 8,800.00*
9* test pits, 180 feet* @ $25.00/ft.*, includes washing excavated material, concentrating contained tin, tantalum, columbium, tungsten, gold, and other minerals or metals, and separating the free gold from the concentrates	4,500.00*

(2) Fixtures and Improvements

None

(3) Rehabilitation and Repairs

None

(4) Labor and Supervision

Engineer-Supervisor @ $50/day - 100 days, includes surveying, map preparation, engaging workmen, renting equipment, purchasing supplies, keeping records, preparing the required Government reports (in quintuplicate)		$5,000.00

(5) Operating Materials and Supplies

Gasoline and lubricants for truck, pumps and washing plant @ $100/mo. - 3½ months		350.00

(6) Operating Equipment

To be rented

1 Pickup truck @ $160.00/mo. - 3½ months, includes all repairs		560.00

(7) Miscellaneous

Meals and quarters - 687 days @ $8.00*/day	$5,496.00	
Engineer and personnel traveling expenses	1,000.00	
Analytical work - 89 samples @ $25.00/sample	2,225.00	
		8,721.00

(8) Contingencies

Unforeseen expenses	2,000.00*
Estimated Cost of Phase II	$29,931.00*
Government Participation - 90%	$26,937.90*

MF-203

OWNER'S CONSENT TO LIEN

WHEREAS, the undersigned, as owner, co-owner, lessor, or seller has an interest in certain property in the State of South Dakota, County of Lawrence, described as follows:1/

The Harkness Claim; the Harkness No. 1; the Harkness No.2; the Harkness No.3; the Harkness No.4; the Harkness NO.5; the Harkness No.6 ; the Harkness No.7; the Harkness No.8- bounded on the North by M.S.392 as described in deposition amendment to lease dated 8-8-48.

which is the subject of a proposed exploration project contract, hereinafter called the "contract", between the United States of America, hereinafter called the "Government", and

2/ _____

_____

_____

hereinafter called the "Operator"; and

WHEREAS, under certain provisions of said contract which are set forth on the reverse side hereof, the Government is entitled to a percentage royalty on production and to certain other rights and equities which do or may conflict with or be adverse to the interest of the undersigned in said property;

NOW THEREFORE, the undersigned, in consideration of said contract and as an inducement to the Government to enter into same, undertakes and agrees as follows:

1. The Government's equity in and right to dismantle, sever, take possession of, and remove and dispose of facilities, buildings, fixtures, equipment, or other items as provided in the contract, or any amendment thereof, shall prevail over and be prior and superior to any conflicting or adverse rights of the undersigned, and the Government is authorized to enter upon the land for such purposes.

2. To secure the payment to the Government of the percentage royalty on production3/ provided for under the terms of said exploration project contract, or any amendment thereof which does not increase the maximum amount of the Government's claim here stated or alter the provisions for repayment, there is hereby granted to the Government a lien upon the land herein described and upon any production of minerals therefrom, until the royalty claim is fully paid in the amount of the Government's contribution, not in excess of 4/$ 90% of the total cost of exploration or ten years have elapsed from the date of the contract.

3. The undersigned shall commit no act nor assert any claim that may contravene or conflict with the lien, claim, or rights of the Government under the provisions of said contract. This agreement shall be binding upon the heirs, executors, administrators, successors, and assigns of the undersigned.

Dated this 16th day of October, 1952.

W. O. Hillmore [Seal]

_____ [Seal]

_____ [Seal]

1/ Either (a) insert the legal description of the land, or (b) strike out the words "as follows" and insert "in a lease [or contract, deed, or other document] dated _____, and recorded in book _____ page _____ official records of said county." If (b) is used, the book and page of recordation cannot be dispensed with. If the space provided is insufficient, use an Annex, and refer to the Annex in the space.

2/ Insert the name of the Operator as it will appear in the exploration project contract.

3/ Mining or production from the land is not required, and in the absence of production there is no obligation to repay the Government.

4/ Insert the maximum amount of the Government's contribution.

RELEVANT CONTRACT PROVISIONS

Repayment by Operator. (a) If, at any time, the Government considers that a discovery or a development from which production may be made has resulted from the exploration work, the Government, at any time not later than six months after the Operator has rendered the required final report and final account, may so certify in writing to the Operator. The certification shall describe broadly or indicate the nature of the discovery or development. In the event of such certification, any minerals mined or produced from the land described in Article 2 within 10 years from the date of this contract, including any mined or produced before the certification, shall be subject to a percentage royalty which the Operator or his successor in interest shall pay to the Government, upon the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production, in whatever form disposed of, including ore, concentrates, or metal, until the total amount contributed by the Government, without interest, is fully repaid, or said 10 years have elapsed, whichever occurs first, as follows:

(1) One and one-half (1½) per cent of any such net amounts not in excess of eight dollars ($8.00) per ton.

(2) One and one-half (1½) per cent of any such net amounts, plus one-half (½) per cent such net amounts for each additional full fifty cents ($0.50) by which such net amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) per cent of such net amounts.

(For instance: the percentage royalty on a net amount of five dollars ($5.00) per ton, would be one and one-half (1½) per cent; on a net amount of ten dollars ($10.00) per ton, three and one-half (3½) per cent.)

(b) As here used, "net smelter returns", "net concentrator returns", and "other net amounts realized from the sale or other disposition", mean gross revenue from sales; or if not sold, the market value, the market value of the material after it is mined in the form in which and the place where it is held. In the case of integrated operations in which the material is not disposed of as such, these terms mean what is or would be gross income from mining operations for percentage depletion purposes in income tax determination.

(c) To secure the payment of its percentage royalty, the Government shall have and is hereby granted a lien upon the land described in Article 2 and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

(d) This article is not to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

Title to and disposition of property. All facilities, buildings, fixtures, equipment, or other items costing more than $50.00 each, paid for or purchased with funds contributed jointly by the Operator and the Government, although title may be taken in the name of the Operator, shall belong to the Operator and the Government jointly, in proportion to their respective contributions, and upon the completion of the work or the termination of the contract shall be disposed of promptly by the Operator for the joint account of the Government and the Operator, either by return to the vendor, by sale to others, or purchase by the Operator at a price at least as high as could otherwise be obtained, as may appear to be for the best interest of the Government, unless the Government, in writing, waives its interest in any such item. If necessary to accomplish such disposition, the Operator shall dismantle, sever from the land, and remove any such item, the cost thereof to be for the joint account of the parties in proportion to their respective interests. If the Operator, within 90 days after the receipt of written notice from the Government, fails, neglects, or refuses to dispose of such property, the Government may itself enter upon the land, take possession of, and remove and dispose of any such property as above provided.

MF-203

OWNER'S CONSENT TO LIEN

WHEREAS, the undersigned, as owner of the mineral rights and water rights has an interest in certain property in the State of South Dakota, County of Lawrence, described as follows:1/ Placer Claim Lot No. 393 in Rawlins District as per patent recorded August 20, 1898 at 3:00 o'clock P.M. in Book 139 Page 14 in the Lawrence County Court House, Deadwood, South Dakota. The above containing 138.27 acres according to the survey thereof.

which is the subject of a proposed exploration project contract, hereinafter called the "contract", between the United States of America, hereinafter called the "Government", and

2/ Keenan d/b/a/ Keenan Properties, Spearfish, South Dakota

hereinafter called the "Operator"; and

WHEREAS, under certain provisions of said contract which are set forth on the reverse side hereof, the Government is entitled to a percentage royalty on production and to certain other rights and equities which do or may conflict with or be adverse to the interest of the undersigned in said property;

NOW THEREFORE, the undersigned, in consideration of said contract and as an inducement to the Government to enter into same, undertakes and agrees as follows:

1. The Government's equity in and right to dismantle, sever, take possession of, and remove and dispose of facilities, buildings, fixtures, equipment, or other items as provided in the contract, or any amendment thereof, shall prevail over and be prior and superior to any conflicting or adverse rights of the undersigned, and the Government is authorized to enter upon the land for such purposes.

2. To secure the payment to the Government of the percentage royalty on production3/ provided for under the terms of said exploration project contract, or any amendment thereof which does not increase the maximum amount of the Government's claim here stated or alter the provisions for repayment, there is hereby granted to the Government a lien upon the land herein described and upon any production of minerals therefrom, until the royalty claim is fully paid in the amount of the Government's contribution, not in excess of 4/$ 90% of the total cost of exploration, or ten years have elapsed from the date of the contract.

3. The undersigned shall commit no act nor assert any claim that may contravene or conflict with the lien, claim, or rights of the Government under the provisions of said contract. This agreement shall be binding upon the heirs, executors, administrators, successors, and assigns of the undersigned.

Dated this 14 day of October, 1952.

BLACK HILLS TIN COMPANY [Seal]

Ross J. Beatty Jr.

ATTEST: By [signature] [Seal]

Its President

[signature] [Seal]

Its Secretary

Del. Corp. 332 So. Michigan Ave. Chicago 4, Illinois

1/ Either (a) insert the legal description of the land, or (b) strike out the words "as follows" and insert "in a lease [or contract, deed, or other document] dated _____, and recorded in book _____ page _____ official records of said county." If (b) is used, the book and page of recordation cannot be dispensed with. If the space provided is insufficient, use an Annex, and refer to the Annex in the space.

2/ Insert the name of the Operator as it will appear in the exploration project contract.

3/ Mining or production from the land is not required, and in the absence of production there is no obligation to repay the Government.

4/ Insert the maximum amount of the Government's contribution.

RELEVANT CONTRACT PROVISIONS

Repayment by Operator. (a) If, at any time, the Government considers that a discovery or a development from which production may be made has resulted from the exploration work, the Government, at any time not later than six months after the Operator has rendered the required final report and final account, may so certify in writing to the Operator. The certification shall describe broadly or indicate the nature of the discovery or development. In the event of such certification, any minerals mined or produced from the land described in Article 2 within 10 years from the date of this contract, including any mined or produced before the certification, shall be subject to a percentage royalty which the Operator or his successor in interest shall pay to the Government, upon the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production, in whatever form disposed of, including ore, concentrates, or metal, until the total amount contributed by the Government, without interest, is fully repaid, or said 10 years have elapsed, whichever occurs first, as follows:

(1) One and one-half (1½) per cent of any such net amounts not in excess of eight dollars ($8.00) per ton.

(2) One and one-half (1½) per cent of any such net amounts, plus one-half (½) per cent such net amounts for each additional full fifty cents ($0.50) by which such net amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) per cent of such net amounts.

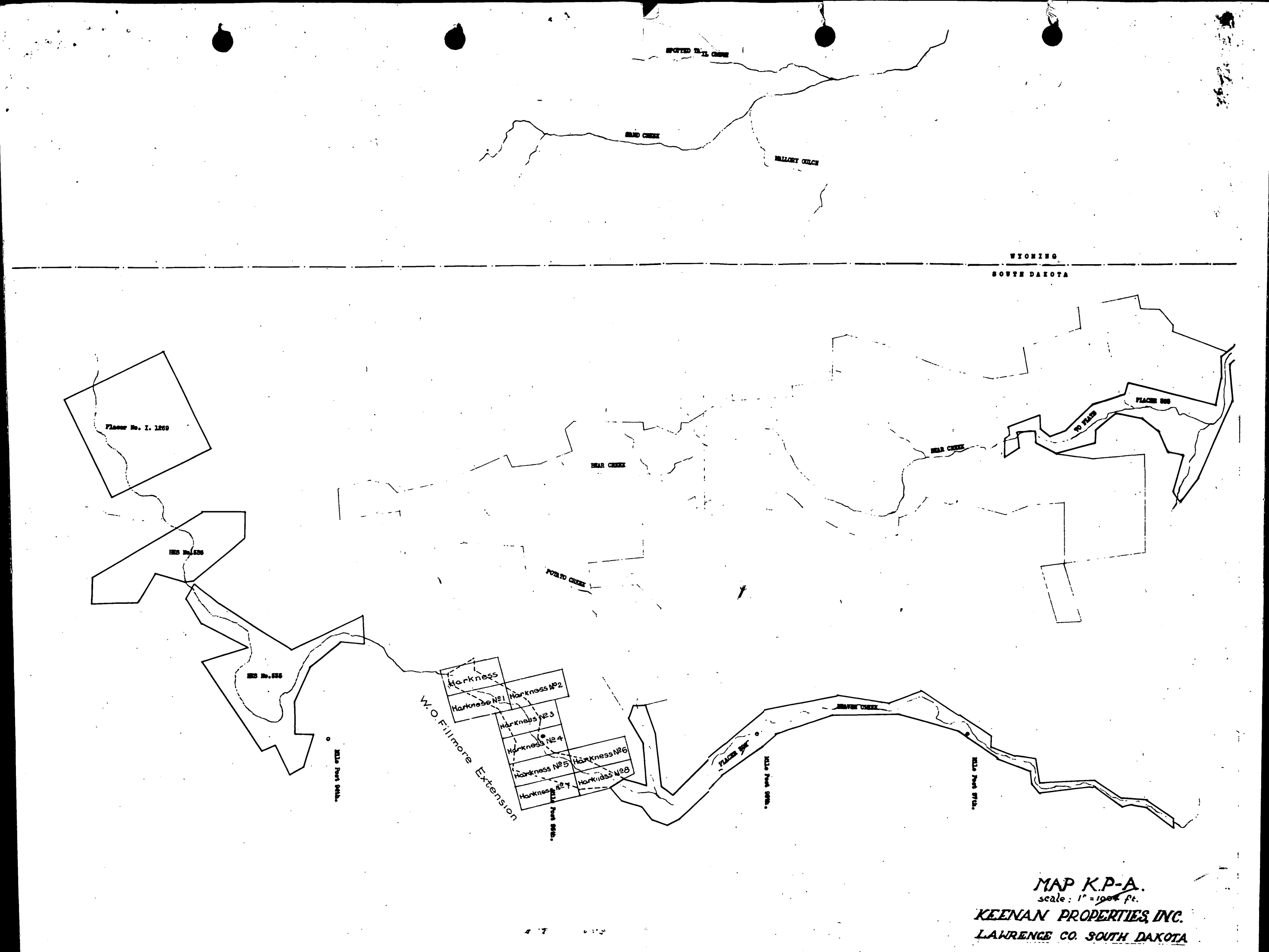
(For instance: the percentage royalty on a net amount of five dollars ($5.00) per ton, would be one and one-half (1½) per cent; on a net amount of ten dollars ($10.00) per ton, three and one-half (3½) per cent.)

(b) As here used, "net smelter returns", "net concentrator returns", and "other net amounts realized from the sale or other disposition", mean gross revenue from sales; or if not sold, the market value, the market value of the material after it is mined in the form in which and the place where it is held. In the case of integrated operations in which the material is not disposed of as such, these terms mean what is or would be gross income from mining operations for percentage depletion purposes in income tax determination.

(c) To secure the payment of its percentage royalty, the Government shall have and is hereby granted a lien upon the land described in Article 2 and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

(d) This article is not to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

Title to and disposition of property. All facilities, buildings, fixtures, equipment, or other items costing more than $50.00 each, paid for or purchased with funds contributed jointly by the Operator and the Government, although title may be taken in the name of the Operator, shall belong to the Operator and the Government jointly, in proportion to their respective contributions, and upon the completion of the work or the termination of the contract shall be disposed of promptly by the Operator for the joint account of the Government and the Operator, either by return to the vendor, by sale to others, or purchase by the Operator at a price at least as high as could otherwise be obtained, as may appear to be for the best interest of the Government, unless the Government, in writing, waives its interest in any such item. If necessary to accomplish such disposition, the Operator shall dismantle, sever from the land, and remove any such item, the cost thereof to be for the joint account of the parties in proportion to their respective interests. If the Operator, within 90 days after the receipt of written notice from the Government, fails, neglects, or refuses to dispose of such property, the Government may itself enter upon the land, take possession of, and remove and dispose of any such property as above provided.


SPOTTED TAIL CREEK
SAND CREEK
BALLCRY GULCH
WYOMING
SOUTH DAKOTA
Placer No. I. 1269
HES No.1526
HES No.636
BEAR CREEK
POTATO CREEK
BEAR CREEK
TO PLACER
PLACER 500
Harkness
Harkness No 1
Harkness No 2
Harkness No 3
Harkness No 4
Harkness No 5
Harkness No 6
Harkness No 7
Harkness No 8
W.O. Fillmore Extension
BEAVER CREEK
PLACER 500
Mile Post 96Mb.
Mile Post 97Mb.
Mile Post 97½b.
MAP K.P-A.
scale: 1" = 1000 ft.
KEENAN PROPERTIES, INC.
LAWRENCE CO. SOUTH DAKOTA

Docket

AMENDMENT NO. 2

Docket DMA-654X, Tin, Columbium, Tantalum, Tungsten
Exploration Project Contract Idm-258
Peggy Keenan d/b/a Keenan Properties
421 Tower Building, Washington 5, D. C.

Exploration Project Contract No. Idm-258, dated July 16, 1951, between the United States of America and Peggy Keenan d/b/a Keenan Properties, is hereby amended as follows:

> Sections 2 and 3, Labor and Supervision, of Phase 1 of the contract, totalling $2300, are amended by adding the sum of $381.96 to the total, making the total allowance for these two items the sum of $2681.96.

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate total amount which the Government may pay, or the percentage of the costs which the Government may pay, under the provisions of Article 13 of the contract form.

The work under Phase 1 is fully performed, and this amendment settles and satisfies all obligations of the parties, one to the other, under Phase 1.

Dated May 8, 1952.

United States of America

By C O Mittendorf
Acting Administrator - DMEA

Peggy Keenan
Peggy Keenan - Operator

#1

Contract Number [illegible], Contract Number [illegible] dated July 14, 1951 between the United States of America and Peter Kiewit [illegible] Corporation is hereby amended as follows:

1. The description of Item 1 under Exhibit A amended to provide for a roof shaft or shafts in general way drop or trench. This grant specifically is to Kiewit forming over the equipment of Peter Kiewit and Morrison Knudsen, as Kiewit Survey [illegible].

2. The list in Exhibit A under the title "Operating Equipment" is amended to provide for the rental of a passenger car and a pickup truck, at rates of $[illegible] a month and $[illegible] a month, respectively.

3. The list in Exhibit A under the title "Operating Equipment" is amended to provide for the rental of a 1/2-yd. dragline for approximately [illegible] days at $[illegible] an hour (the rate to include operator, fuel, and upkeep of equipment) to be used in lieu of the [illegible] as amended.

4. The list in Exhibit A under the title "Operating Equipment" is amended to provide for the rental of additional subgrading gauges as needed.

5. Item 2 under "Labor and Supervision" in Exhibit A is amended to provide for six helpers instead of four at $[illegible] an hour with time and a half for overtime.

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate total amount which the Government may pay, or the percentage of the costs which the Government may pay, under the provisions of Article 16 of the contract form.

Dated Aug 31, 1951

By [illegible]
[illegible], USA

By Peter Kiewit
[illegible], Peter Kiewit Corporation

MF-200
(June 1951)

Docket No. DMA 654x
Commodity Tin
Columbian
Tantalum
Tungsten
Idm-E58

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

EXPLORATION PROJECT CONTRACT [1]

It is agreed this 16th day of July, 1951, between the United States of America, acting through the Department of the Interior, Defense Minerals Administration, hereinafter called the "Government," and [2]
Peggy Keenan d/b/a Keenan Properties
% W. C. Broadgate
421 Tower Building
Washington 5, D. C.
hereinafter called the "Operator," as follows:

1. *Authority for contract.* This agreement is entered into under the authority of the Defense Production Act of 1950, pursuant to Mineral Order 5, entitled "Regulations Governing Government Aid in Defense Exploration Projects."

2. *Operator's property rights.* The exploration project shall be conducted on that certain property situated in the State of South Dakota, County of Lawrence described as follows: [3] located placer mining claims on Bear Creek and on Potato Creek in the Bear Creek area, Rawlins Mining District, as specified in Appendix 1 attached hereto.

with respect to which the Operator represents and undertakes: [4] See Appendix 1 attached hereto

~~(a) That he is the sole owner in possession and entitled to possession, and that the property is subject only to the following claims, liens, or encumbrances as to each of which the subordination agreement of the holder is attached:~~

~~(b) That he is a lessee in possession and entitled to possession, and the subordination agreement of the lessor is attached.~~

3. *Exploration project.* The Operator, within 10 days from the date of this contract shall commence work on a project of exploration for [5] tin, columbium, tantalum, tungsten; shall prosecute the work efficiently, expertly, in a workmanlike manner, in accordance with good mining standards, with suitable and adequate equipment, materials, and labor, all properly designed to bring the project to completion within a period of [6] 30 days (Phase 1) from the date of this contract. The exploration project and the work to be performed are more fully described on Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, is made a part of this contract.

4. *Performance of the work.* The work shall be performed by the Operator, under his sole direction and control: *Provided,* That with the consent of the Government and its written approval of the contract or contracts, all or any part of the work may be performed by the Operator through contract or contracts with independent contractors. The Government shall have the right to enter and observe and inspect the work at all reasonable times, and the Operator shall provide the Government with all available means for doing so. The Government may consult with and advise the Operator on all phases of the work.

5. *Fixtures and improvements.* The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof. Any additional facilities, buildings, and fixtures, to be purchased, installed, or erected by the Operator, with the estimated cost of each, to which the Government will contribute currently its agreed pro rata share, are listed in Exhibit "A" attached hereto. The difference between the cost of such additional facilities, buildings, or fixtures, and the salvage value thereof at the conclusion of the work, shall be charged as a cost of the project to which the Government has contributed its pro rata share.

6. *Operating equipment.* Any operating equipment to be rented, purchased, or furnished by the Operator, with the allowable rental, purchase price, or depreciation, as the case may be, is listed under appropriate headings in Exhibit "A" attached hereto. As to equipment purchased for the project, the Government will contribute its agreed pro rata share of the cost thereof, and the difference between the cost and the salvage value at the conclusion of the work shall be charged as a cost of the project to which the Government has contributed its pro rata share.

[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] State name, address, and nature of organization if any.
[3] Give legal description or enough to identify the property.
[4] Strike out the provision not applicable.
[5] Name of mineral.
[6] Not in excess of 2 years.

7. *Title to and disposition of property.* All facilities, buildings, fixtures, equipment, or other items costing more than $50 each, paid for or purchased with funds contributed jointly by the Operator and the Government, shall belong to the Operator and the Government jointly, in proportion to their respective contributions, and upon the termination of the contract, if they have any salvage value, shall be disposed of for their joint account unless the Government, in writing, waives its interest in any such items. The Government may require the dismantling, severance from land, and removal of any such items in order to realize its interest in the salvage value thereof, and the cost of any such removal and of the disposal of the items shall be for the joint account of the parties in proportion to their respective interests.

8. *Labor and supervision.* An itemized schedule of labor, by numbers and classes (miners, muckers, millmen, etc.), and of supervisors, by numbers and positions, with the maximum wages or salaries that may be paid to each as an allowable cost of the project is set forth in Exhibit "A" attached hereto.

9. *Rehabilitation and repairs.* A statement of the cost of any necessary rehabilitation or repairs to put existing facilities, buildings, installations, and fixtures into useful and operable condition and which are to be allowed as costs of the project is included in Exhibit "A."

10. *Allowable costs of the project.* The costs of the project in which the Government will participate are limited to the necessary, reasonable, direct costs of performing the exploration work, including the costs of materials, supplies, engineering, power, water, analytical work, accounting, and utilities, including items of equipment costing less than $50 each; and the costs referred to in Articles 5, 6, 8, and 9, and the exhibits annexed to and referred to in this contract. Although the Government may pay part of the cost of new or additional facilities, structures, buildings, and equipment, only the depreciation on such items, computed as indicated in Articles 5 and 6, will be charged as a cost of the project. No items of general overhead, corporate management, interest, taxes, or any other indirect costs not expressly allowed by these provisions, or work performed or costs incurred before the date of this contract, shall be allowed as costs of the project in which the Government will participate.

11. *Accounts and audits.* The Operator shall keep suitable records and accounts of operations, which the Government may inspect and audit at any time. The Government may at any time require an audit of the Operator's records and accounts by a certified public accountant, the cost thereof to be treated as a cost of the project. The Operator shall keep and preserve said records and accounts for at least 3 years after the completion of the project or the termination of this contract.

12. *Progress reports.* The Operator shall provide the Government with monthly reports of work performed under the contract upon forms to be provided by the Government. Each monthly progress report shall bear the certification of the Operator and shall constitute the Operator's invoice of costs incurred on the project during the period covered by the report.

13. *Payment to the Operator.* The monthly progress report (invoice), to the extent approved by the Government, shall be processed for payment by the Government. Payment shall be made in the amount of 90 percent of the approved costs incurred; *Provided,* That the aggregate total of all sums paid by the Government under this agreement shall not exceed $90,000.00, which is 90 percent of the agreed estimated total cost of this project, $100,000.00.

14. *Final reports by Operator.* Upon completion of the project or termination of this contract, the Operator shall provide the Government with a comprehensive geologic and engineering report, including an estimate of ore reserves, to the best of his ability. Four copies of all reports shall be furnished to the Government.

15. *Repayment by Operator.* If, upon the completion of the exploration project or termination of the contract, the Government considers that a discovery or development has resulted from the work from which commercial production of ore may be made, the Government, within 6 months thereafter, shall so certify to the Operator, particularly describing and delimiting its estimate of the discovery or the development. Thereafter, if and as ore is produced as a result of such discovery or development, the Operator and his successor in interest shall be and become obligated to pay to the Government a percentage royalty on the net smelter returns or other net proceeds realized from such ore, concentrates, or metal produced within ten (10) years from the date of this contract, until the total amount contributed by the Government, without interest, is fully repaid or said 10 years have elapsed, whichever occurs first, as follows:

Of net smelter returns or other net proceeds not in excess of eight dollars ($8.00) per ton of ore: One and one-half (1½) percent.

Of net smelter returns or other net proceeds in excess of eight dollars ($8.00) per ton of ore: One and one-half (1½) percent, plus one-half (½) percent for each additional full fifty cents ($0.50) in excess of eight dollars ($8.00) per ton of ore, but not in excess of a maximum of five (5) percent.

This obligation to repay from net returns or proceeds shall be and remain a claim and lien upon the mineral deposit which is the subject of the exploration project and upon any production resulting from such discovery or development, in favor of the Government, until fully paid, or until said 10-year period has elapsed; and this claim and lien and the Government's right to repayment shall survive any termination of the contract, whether by completion of the exploration project or otherwise. This article is not to be construed as imposing any obligation on the Operator or his successor in interest to produce ore from any such discovery or development.

16. *No assignment of contract.* Without the written consent of the Government, the Operator shall not assign or otherwise transfer or hypothecate this contract or any rights thereunder.

17. *Termination and completion.* The Government may, at any time, by written notice to the Operator, terminate this contract: (*a*) If the Operator fails to provide his share of the money necessary to prosecute operations pursuant to the terms of the contract; (*b*) if the Operator, in the opinion of the Government, fails to prosecute operations pursuant to the terms of the contract; or (*c*) if in the opinion of the Government, operations up to the time of the notice have not indicated the probability of making any worthwhile discovery and in the opinion of the Government further operations are not justified. Upon the completion of the project or any termination of the contract the Operator shall render to the Government a full and final accounting of his operations under the contract and his expenditures of money; shall dispose of any unused materials, supplies, and equipment for the joint account of the Operator and the Government in the proportion of their respective interests; and shall pay to the Government its pro-rata share of any money remaining.

Executed in sextuplicate the day and year first above written.

Peggy Keenan
d/b/a Keenan Properties
(Operator)

By Peggy Keenan

THE UNITED STATES OF AMERICA

By C. O. Mittendorf

C. O. Mittendorf, Director, P.E.D.
Defense Minerals Administration

U. S. GOVERNMENT PRINTING OFFICE 16—64066-2

APPENDIX I

The Operator represents, undertakes, and warrants that:

(a) She is the sole owner in possession and entitled to possession of the following claims which are free of all liens and encumbrances of any sort:

Gold Bond	Recorded April 26, 1951, Book 311, Page 234.
Gold Bond No. 1	Recorded April 26, 1951, Book 311, Page 235.
Gold Bond No. 4	Recorded April 26, 1951, Book 311, Page 236.
Three Jims No. 5	Recorded April 26, 1951, Book 311, Page 237.

(b) She is a lessee in possession and entitled to possession of the following claims under the instruments as shown and the subordination agreements of the lessors are attached:

Potato Creek - Beaver Creek Area

Leased from W. O. Fillmore:

Placer Survey MS. 392,	Lease dated	November 1, 1949.			Unrecorded.	
Belmont	"	"	August 8, 1948.		"	
Belmont #1,#2,#3 & #4,	"	"	"	"	"	"
Daisy	"	"	"	"	"	"
Daisy #2	"	"	"	"	"	"

Bear Creek Area

Golden Star #2 - Leased from Dakota Tin & Gold Company by instrument dated July 16, 1948, recorded in book 301, page 157.

Oma & Oma Fraction - Leased from Dakota Tin & Gold Company by instrument dated July 16, 1948, recorded in book 301, page 157.

Mayflower #1, #2, #3 and #4 - Leased from W. O. Fillmore by instrument dated August 8, 1948. Unrecorded.

Union - Leased from L. G. and W. O. Fillmore (Connor's ground) by instrument dated November 1, 1949. Unrecorded.

Union #3, #5 and #7 - Leased from L. G. & W. O. Fillmore (Connor's ground) by instrument dated November 1, 1949. Unrecorded.

Elizabeth #9, #10, #11 and #12 - Leased from L. G. and W. O. Fillmore (Connor's ground) by instrument dated June 14, 1948, recorded in book 301, pages 157 and 164.

Elizabeth #7, #8, #13 and #14 - Leased from L. G. and W. O. Fillmore (Connor's ground) by instrument dated June 14, 1948, recorded in book 301, pages 157 and 164.

(c) The above designated leases are now and during the term of this agreement will be in full force and effect.

EXHIBIT "A"

The exploratory work to be performed under this contract will consist of two parts, Phase 1 and Phase 2. Phase 1 will commence immediately. Phase 2 will depend upon the outcome of Phase 1 and will be commenced only upon the written approval of the Government.

Phase 1

Phase 1 will consist of bulldozing five trenches to bedrock, three across the gravel deposit on Bear Creek and two across the gravel deposit on Potato Creek at points to be selected by the representatives of the Government working in conjunction with the Operator's engineer. The Operator is to sample carefully the gravel taken from the trenches in accordance with conventional and approved sampling practices and will submit a complete report of the results obtained to the Government upon completion of the project. The estimated cost of Phase 1 is as follows:

Fixtures and improvements - None

Operating Equipment:

Equipment to be purchased - None

Equipment to be rented:

1. D8 Cat, bulldozer, scraper, approximately 20 days @ $14.00 per hour (The rate includes operator, fuel and upkeep of equipment.)	$2,200.00	
2. Two- 4 self priming pumps including suction hose and pipe	400.00	
3. Small equipment shovels, pans, incidentals, supplies	100.00	
Subtotal	$	2900.00

Amend #2 — 4.05

Equipment to be supplied - None

4. Passenger car @ $291/mth
5. Pickup @ $271/mth

Labor and supervision:

1. Superintendent in charge of sampling One @ $_____ per day	1,000.00	
2. Rockers in charge of panning Two @ $_____ per day	800.00	
3. Helpers (laborer) Four @ $1.00 to $1.57½ per hour with time and a half for overtime	1500.00	
4. Truck driver - One @ $1.00 to $1.50 per hour	350.00	
5. Allowance to employees for room and board at Spearfish in lieu of board and lodging furnished on the job	1250.00	
6. Travel - Three Men	2400.00	
7. Services of Mr. Walter W. Johnson 30 days @ $100.00 per day	3000.00	
8. General supervision, bookkeeping, vouchers, and records - Wages of employees allocated upon the basis of time actually spent on the project	500.00	
Subtotal		$10,800.00

Rehabilitation and repairs - None

Miscellaneous other costs:

Fuel and repairs for pumps, engines and truck	500.00	
Assaying approximately 50 samples	3500.00	
Compensation insurance, public liability insurance, etc.	500.00	
Contingency	1000.00	
Subtotal		$ 5500.00
Grand Total		19,000.00

MF-202

LANDLORD'S SUBORDINATION AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

WHEREAS, the undersigned is the owner in fee simple of that certain parcel of ground in the county of Lawrence, State of South Dakota, described in a certain Exploration Project Contract dated June 16, 1951, between Peggy Keenan, Keenan Properties and Defense Minerals Administration, the Lessee of said property, and the United States of America;

NOW, THEREFORE, the undersigned, as Lessor of said property under leases dated Aug. 8, 1948 and Nov. 1st, 1949, does by these presents subordinate all of his right, title, and interest under the provisions of said lease to the right, title, and interest of the United States of America under the provisions of said Exploration Project Contract, and agrees that the lien and claim of the United States of America under the provisions of said contract shall be prior to the undersigned's rights to rentals or royalties under the terms of said lease; and

The undersigned further agrees that if said leasehold interest should be surrendered or if said lease should terminate at any time prior to the expiration of the rights of the United States of America under said Exploration Project Contract, the undersigned shall assume and does hereby assume all of the obligations of the Lessee under said Exploration Project Contract to make repayment to the United States of America according to the terms of said contract; and

The undersigned agrees to commit no act, nor assert any claim under judicial process or otherwise that may contravene or conflict with the prior lien and claim of the United States of America under the provisions of said Exploration Project Contract.

This undertaking and covenant shall be binding upon the heirs, successors, and assigns of the undersigned.

Dated this 16th day of June, 1951

M. O. Gillman

U. S. GOVERNMENT PRINTING OFFICE 940768

MF-202

LANDLORD'S SUBORDINATION AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

WHEREAS, the undersigned is the owner in fee simple of that certain parcel of ground in the county of Lawrence, State of South Dakota, described in a certain Exploration Project Contract dated June 16, 1951, between Peggy Keenan, Keenan Properties & Defense Minerals Administration, the Lessee of said property, and the United States of America;

NOW, THEREFORE, the undersigned, as Lessor of said property under lease dated Sept 1950, does by these presents subordinate all of his right, title, and interest under the provisions of said lease to the right, title, and interest of the United States of America under the provisions of said Exploration Project Contract, and agrees that the lien and claim of the United States of America under the provisions of said contract shall be prior to the undersigned's rights to rentals or royalties under the terms of said lease; and

The undersigned further agrees that if said leasehold interest should be surrendered or if said lease should terminate at any time prior to the expiration of the rights of the United States of America under said Exploration Project Contract, the undersigned shall assume and does hereby assume all of the obligations of the Lessee under said Exploration Project Contract to make repayment to the United States of America according to the terms of said contract; and

The undersigned agrees to commit no act, nor assert any claim under judicial process or otherwise that may contravene or conflict with the prior lien and claim of the United States of America under the provisions of said Exploration Project Contract.

This undertaking and covenant shall be binding upon the heirs, successors, and assigns of the undersigned.

Dated this 16th day of June, 1951

The Dakota Tin & Gold Co.
William G. Gillmore
Sealy - Treas.

U. S. GOVERNMENT PRINTING OFFICE 940768

... of the Interior
... Minerals Administration
ASSIGNED
NOV 4 - 1954

October 23, 1954

ASSIGNMENT

FOR VALUE RECEIVED, the undersigned, Peggy Keenan, individually, and doing business as Keenan Properties located in Spearfish, South Dakota area, does hereby sell, assign and transfer all of her right, title and interest in and to the following lease to Northwest Defense Minerals, Inc., 2101 S Street, NW, Washington D. C., a duly organised and existing corporation under the Laws of the State of Maryland:

Lease dated June 14, 1948, recorded in book 301, pages 157 and 164, Deadwood, South Dakota, from L. G. and W. O. Fillmore, referred to in Appendix I of the DM EA contract No.-654 No. Idm-258, dated July 16, 1951.

Peggy Keenan

Peggy Keenan

Peggy Keenan d/b/a Keenan Properties

Peggy Keenan, d/b/a Keenan Properties

STATE OF NEW YORK)
) SS:
CITY OF NEW YORK)

I hereby certify that on this 3rd day of December, 1954, before me, a Notary Public of the State of New York, and City of New York, personally appeared Peggy Keenan, individually, and as doing business as Keenan Properties, acknowledged the foregoing assignment to be her act and deed, both in her own behalf and on behalf of Keenan Properties.

Witness my hand and notarial seal the day and year last written above.

Anthony M. Danella
Notary Public

ANTHONY M. DANELLA
Notary Public, State of New York
No. 03-5911700
Qualified in Bronx County
Cert. Filed in New York County
Commission Expires March 30, 1956

My commission expires

Minerals Administration
RECEIVED

October 23, 1954

ASSIGNMENT

FOR VALUE RECEIVED, the undersigned, Peggy Keenan, individually, and doing business as Keenan Properties located in Spearfish, South Dakota area, does hereby sell, assign and transfer all of her right, title and interest in and to the Mining Lease Amendment dated October 23, 1954, which has been made a part of Lease dated August 7, 1948, between W. O. Fillmore, Spearfish, South Dakota, Lessor, and Peggy Keenan, Spearfish, South Dakota, Lessee, to the Northwest Defense Minerals, Inc., 2101 S Street, NW, Washington D. C., a duly organized and existing corporation under the Laws of the State of Maryland.

Peggy Keenan

Peggy Keenan

Peggy Keenan d/b/a

Peggy Keenan, d/b/a Keenan Properties

Keenan Properties

STATE OF NEW YORK)
) SS:
CITY OF NEW YORK)

I hereby certify that on this 3rd day of November, 1954, before me, a Notary Public of the State of New York, and City of New York, personally appeared Peggy Keenan, individually, and doing business as Keenan Properties, acknowledged the foregoing assignment to be her act and deed, both in her own behalf and on behalf of Keenan Properties.

Witness my hand and notarial seal the day and year last written above.

Anthony M. Danella
Notary Public

ANTHONY M. DANELLA
Notary Public, State of New York
No. 03-5911700
Qualified in Bronx County
Cert. Filed in New York County
Commission Expires March 30, 1956

My commission expires

MINING LEASE AMENDMENT

This Amendment to Mining Lease made October 23, 1954 at Spearfish, South Dakota by and between W. O. Fillmore, Spearfish, South Dakota, hereinafter referred to as Lessor, and Peggy Keenan, d/b/a Keenan Properties, Spearfish, South Dakota, hereinafter referred to as Lessee:

WITNESSETH:

WHEREAS, Lessor owns or controls a certain group of claims on Upper Beaver Creek known as the Harkness, Harkness #1, #2, #3, #4, #5, #6, #7, #8 located in Lawrence County, South Dakota,

WHEREAS, Lessee desires to explore, develop, mine and produce concentrates from the placer gravels contained therein;

NOW, THEREFORE, in consideration of the mutual agreements herein contained, and for other good and valuable consideration, the receipt is hereby acknowledged, the parties agree as follows:

1. Lessor hereby demises and leases to Lessee all of his mineral rights in and to the said Claims.

WHEREAS, it is further agreed between the parties that this Amendment to Mining Lease is an Amendment to the lease dated August 7, 1948 by and between W. O. Fillmore, Spearfish, South Dakota, Lessor, and Peggy Keenan, Spearfish, South Dakota and

shall be made a part of the August 7, 1948 lease and all of the covenants of that lease shall be strictly adhered to by the parties.

WHEREAS, this Amendment to Mining Lease dated August 7, 1948 shall be binding upon both parties hereto, their successors, assigns and legal representatives.

IN WITNESS WHEREOF, we have hereunto set our hands and seals on this 28 day of October, 1954.

W. O. Fillmore

W. O. Fillmore, Lessor

Peggy Keenan

Peggy Keenan, Lessee

WITNESSES:

Sylvia Cummings

William G. Fillmore

October 23, 1954

ASSIGNMENT

FOR VALUE RECEIVED, the undersigned, Peggy Keenan, individually, and doing business as Keenan Properties located in Spearfish, South Dakota area, does hereby sell, assign and transfer all of her right, title and interest in and to the Mining Lease Amendment dated October 23, 1954, which has been made a part of Lease dated August 7, 1948, between W. O. Fillmore, Spearfish, South Dakota, Lessor, and Peggy Keenan, Spearfish, South Dakota, Lessee, to the Northwest Defense Minerals, Inc., 2101 S Street, NW, Washington D. C., a duly organized and existing corporation under the Laws of the State of Maryland.

Peggy Keenan

Peggy Keenan

Peggy Keenan d/b/a Keenan Properties

Peggy Keenan, d/b/a Keenan Properties

STATE OF NEW YORK)
) SS:
CITY OF NEW YORK)

I hereby certify that on this 3rd day of November, 1954, before me, a Notary Public of the State of New York, and City of New York, personally appeared Peggy Keenan, individually, and doing business as Keenan Properties, acknowledged the foregoing assignment to be her act and deed, both in her own behalf and on behalf of Keenan Properties.

Witness my hand and notarial seal the day and year last written above.

Anthony M. DaNella

Notary Public
ANTHONY M. DANELLA
Notary Public, State of New York
No. 03-5911700
Qualified in Bronx County
Cert. Filed in New York County
Commission Expires March 30, 1956

My commission expires

MINING LEASE AGREEMENT

This Agreement made August 26, 1954, at Chicago, Illinois, by and between BLACK HILLS TIN COMPANY, a Delaware Corporation, having its principal offices at 332 South Michigan Avenue, Chicago 4, Illinois, hereinafter referred to as Lessor; and NORTHWEST DEFENSE MINERALS, INCORPORATED, a Corporation having its principal offices at 2101 S. Street, N. W., Washington, D.C., and hereinafter referred to as Lessee;

W I T N E S S E T H:

WHEREAS, Lessor owns or controls a certain Placer Mining Claim under and by virtue of the warranty deed more fully described herein, situated in Lawrence County, South Dakota, and known as MS-393 (70 flats on Bear Creek) comprising approximately 138.27 acres; and

WHEREAS, Lessee desires to explore and develop the placer gravels contained in said Claim MS-393 for the purpose of checking and assaying the minerals and metals there contained, in preparation for a mining operation as soon as possible after the values are proven commercial;

NOW, THEREFORE, in consideration of the mutual agreements herein contained, and for other good and valuable consideration, the receipt whereof is hereby acknowledged, the parties agree as follows:

1. Lessor hereby demises and leases to Lessee all

of its placer mining rights in and to Placer Claim Lot No. 393 in Rawlins District, located in Lawrence County, South Dakota, as more fully described in that certain warranty deed from Lessor to Alfred J. Sleep, dated April 26, 1950, and recorded with the Register of Deeds for Lawrence County, South Dakota, November 27, 1950, in Book 309 of Deeds, at Page 542, said lease to continue for one year from date. Lessee shall have the option to extend said lease for two additional periods of one year each, which options shall be exercised by Lessee delivering to Lessor written notice of such intention at lease sixty (60) days before the end of each prior lease year, provided that at the time of exercising said option the Lessee shall have fully performed all of its covenants and agreements hereunder and is not in default.

2. Lessee agrees to use the services of an expert and recognized placer engineer, with the aid of government engineers and facilities for exploration and development of the placer gravels in MS-393, during the years 1954 and 1955, and as soon as feasible thereafter to operate a placer mining recovery unit now engineered and designed.

3. The Lessee agrees to pay to the Lessor ten percent (10) percent of the gross receipts from the sale and production of all of the minerals and metals derived from the operation of the stream gravel placer recovery in quarterly payments, which payments shall be made to Lessor on or before the 10th of the month following their receipt by Lessee.

4. The Lessee agrees to keep accurate records and to render a statement quarterly to Lessor, and Lessor may examine Lessee's records and accounts of this project at any reasonable time.

5. The Lessor grants to the Lessee use of the water rights on the MS-393 (70 flats on Bear Creek) and grants to the Lessee the exclusive right to go upon the above described premises at any and all times with necessary tools, vehicles and equipment, mining or otherwise for the purpose of developing, prospecting, or mining of all minerals, metals and/or concentrates which may contain tin, columbite, tantalite, tungsten or gold. It is agreed that all equipment remains the property of the Lessee. Lessee shall have the right to remove such equipment at any time.

6. Lessee is to have the free and uninterrupted use of all roads built and in use on said premises during the period of this lease Agreement and Lessee shall have the right and privilege hereby to erect such washing and concentrating plants, sluice ways, pipelines, buildings, telephone or high line cable and to do all other things as may be deemed necessary to the proper carrying out of mining operations upon the premises above described.

7. Lessee hereby agrees to and does assume responsibility and liability for all damages and injuries to persons and property which may in any way result from carrying on mining operations under the terms of this Lease Agreement. It being understood that Lessor may

erect and post such notices of non-responsibility and non-liability in connection with the mining operations as carried on under the terms of this Lease, as may be necessary to protect the said Lessor.

8. The Lessee's rights hereunder shall be coextensive with, but in no event shall they exceed the rights to placer mine and otherwise develop the said property as reserved by Lessor in its above described warranty deed to Alfred J. Sleep, dated April 26, 1950. Lessee accepts and is bound by all obligations of Lessor under said warranty deed and agrees to back fill all land placer mined in that area at its expense. This lease shall not be assigned by Lessee without the prior written consent of Lessor.

9. The Lessee further understands that this lease in no way affects the grazing rights upon these premises or the right of fee owner to pasture his cattle and fence in same. The Lessee agrees that due diligence shall be exercised at all times in protecting the live stock in said pasture. The fences and gates shall be kept up and properly closed at all times where interfered with by the Lessee or his assignees, or anyone under his employ. Cattle gates, where feasible, must be installed and kept up by the Lessee. The Lessee further agrees to level off all tailing-piles following placer operations.

10. The Lessee is to have the right of immediate possession to the premises and property herein the subject of this Lease upon the execution of this Agreement.

11. Lessee hereby agrees to advise Lessor from time to time, and upon its request, of the results of the exploration and development work to be accomplished in 1954 and 1955.

12. Time is of the exxence of this Agreement. This Agreement shall be binding upon both parties hereto, their successors, assigns and legal representatives.

13. The parties hereto hereby state that a true and correct copy of the above and foregoing Agreement was delivered to them at the time of execution of this Agreement and further that they acknowledge receipt of the same.

IN WITNESS WHEREOF we have hereunto set out hands and seals on this 26th day of August 1954.

BLACK HILLS TIN COMPANY, (LESSOR)

ATTEST: BY: /S/ Ross J. Beatty, Jr., President

/S/ Edward A. Brophy
Secretary

NORTHWEST DEFENSE MINERALS, INC. (LESSEE)

ATTEST: BY: /S/ Peggy Keenan, President

/S/ John F. Stanwell-Fletcher
Secretary

STATE OF ILLINOIS)
SS
COUNTY OF COOK)

On this 13th day of Sept. 1954, before me JULIA KOVALIK, a Notary Public in and for said County and State, personally appeared ROSS J. BEATTY, JR., known to me to be the President of BLACK HILLS TIN COMPANY, the Corporation that is described in and that executed the foregoing instrument, and acknowledged to me that said Corporation executed the same as its free and voluntary act and deed.

/S/ Julia Kovalik

My commission expires: 7-25-58 Notary Public

STATE OF NEW YORK)
SS
COUNTY OF NEW YORK)

On this 9th day of September 1954, before me ANTHONY M. DANELLA, a Notary Public in and for said County and State, personally appeared PEGGY KEENAN, known to me to be the President of Northwest Defense Minerals, Inc., the Corporation that is described in and that executed the foregoing instrument, and acknowledged to me that said Corporation executed the same as its free and voluntary act and deed.

/S/ Anthony M. Danella

Notary Public, State of New York
No. 03-5911700 - Qual. in Bronx County, Cert. filed in N.Y. County, Comm. Exp. March 30, 1956

Defense Minerals
RECEIVED
NOV 4 - 1954

August 10, 1954

FOR VALUE RECEIVED, the undersigned PEGGY KEENAN, individually, and doing business as KEENAN PROPERTIES, does hereby sell, assign and transfer all of her right, title and interest in and to the following claims in the Tinton area of Lawrence County, South Dakota to Northwest Defense Minerals, Inc., a duly organized and existing corporation under the Laws of the State of Maryland:

1. Gold Bond
2. Gold Bond #1
3. Gold Bond #4
4. Three Jims #5

Peggy Keenan
PEGGY KEENAN

Peggy Keenan d/b/a Keenan Properties
PEGGY KEENAN, D/B/A KEENAN PROPERTIES

STATE OF NEW YORK)
) SS:
CITY OF NEW YORK)

I hereby certify that on this 3rd day of November, 1954, before me, a Notary Public of the State of New York, and City of New York, personally appeared Peggy Keenan, individually, and as doing business as Keenan Properties, acknowledged the foregoing assignment to be her act and deed, both in her own behalf and on behalf of Keenan Properties.

Witness my hand and notarial seal the day and year last written above.

Anthony M. Daneli

Notary Public

ANTHONY M. DANELIA
Notary Public, State of New York
No. 03-5911700
Qualified in Bronx County
Cert. Filed in New York County
Commission Expires March 30, 1956

My commission expires

FOR VALUE RECEIVED, the undersigned PEGGY KEENAN, individually, and doing business as KEENAN PROPERTIES, does hereby sell, assign and transfer all of her right, title and interest in and to the following claims in the Tinton area of Lawrence County to Northwest Defense Minerals, Inc., a duly organized and existing corporation under the Laws of the State of Maryland:

1. Gold Bond
2. Gold Bond #1
3. Gold Bond #4
4. Three Jims #5

Peggy Keenan

PEGGY KEENAN

Peggy Keenan d/b/a Keenan Properties

PEGGY KEENAN, D/B/A KEENAN PROPERTIES

STATE OF NEW YORK)
) SS:
CITY OF NEW YORK)

I hereby certify that on this 27th day of September, 1954, before me, a Notary Public of the State of New York, and City of New York, personally appeared Peggy Keenan, individually, and as doing business as Keenan Properties, acknowledged the foregoing assignment to be her act and deed, both in her own behalf and on behalf of Keenan Properties.

Witness my hand and notarial seal the day and year last written above.

Anthony M. Danella
Notary Public

ANTHONY M. DANELLA
Notary Public, State of New York
No. 03-5911700
Qualified in Bronx County
Cert. Filed in New York County
Commission Expires March 30, 1956

My commission expires

August 10, 1954

FOR VALUE RECEIVED, the undersigned, Peggy Keenan, individually, and doing business as Keenan Properties, does hereby sell, assign and transfer all of her right, title and interest in and to the following leases to Northwest Defense Minerals, Inc., a duly organized and existing corporation under the Laws of the State of Maryland:

Lease dated July 17, 1950, between Dakota Tin & Gold Company, a South Dakota Corporation, of Spearfish, South Dakota, Lessor, and Peggy Keenan, of Spearfish, South Dakota, Lessee.

Lease dated August 7, 1948, between W. O. Fillmore, of Spearfish, South Dakota, as Lessor, and Peggy Keenan, of Spearfish, South Dakota, as Lessee.

Lease dated November 1, 1949, between W. O. Fillmore and Lillian Fillmore, his wife, of Spearfish, South Dakota, as Lessors, and Peggy Keenan, of Spearfish, South Dakota, as Lessee.

Lease dated November 1, 1949, between W. O. Fillmore, of Spearfish, South Dakota, as Lessor, and Peggy Keenan, of Spearfish, South Dakota, as Lessee.

Peggy Keenan

Peggy Keenan

Peggy Keenan d/b/a Keenan Properties

Peggy Keenan d/b/a Keenan Properties

STATE OF NEW YORK)
) SS:
CITY OF NEW YORK)

I hereby certify that on this 3rd day of November, 1954, before me, a Notary Public of the State of New York, and City of New York, personally appeared Peggy Keenan, individually, and as doing business as Keenan Properties, acknowledged the foregoing assignment to be her act and deed, both in her own behalf and on behalf of Keenan Properties.

Witness my hand and notarial seal the day and year last written above.

Anthony M. Danella
Notary Public

ANTHONY M. DANELLA
Notary Public, State of New York
No. 03-5911700
Qualified in Bronx County
Cert. Filed in New York County
Commission Expires March 30, 1956

My commission expires

FOR VALUE RECEIVED, the undersigned, Peggy Keenan, individually, and doing business as Keenan Properties, does hereby sell, assign and transfer all of her right, title and interest in and to the following leases to Northwest Defense Minerals, Inc., a duly organized and existing corporation under the Laws of the State of Maryland:

Lease dated July 17, 1950, between Dakota Tin & Gold Company, a South Dakota Corporation, of Spearfish, South Dakota, Lessor, and Peggy Keenan, of Spearfish, South Dakota, Lessee.

Lease dated August 7, 1948, between W. O. Fillmore, of Spearfish, South Dakota, as Lessor, and Peggy Keenan, of Spearfish, South Dakota, as Lessee.

Lease dated November 1, 1949, between W. O. Fillmore and Lillian Fillmore, his wife, of Spearfish, South Dakota, as Lessors, and Peggy Keenan, of Spearfish, South Dakota, as Lessee.

Lease dated November 1, 1949, between W. O. Fillmore, of Spearfish, South Dakota, as Lessor, and Peggy Keenan, of Spearfish, South Dakota, as Lessee.

Peggy Keenan

Peggy Keenan

Peggy Keenan d/b/a Keenan Properties

Peggy Keenan d/b/a Keenan Properties

STATE OF NEW YORK)
) SS:
CITY OF NEW YORK)

I hereby certify that on this 30th day of August, 1954, before me, a Notary Public of the State of New York, and City of New York, personally appeared Peggy Keenan, individually, and as doing business as Keenan Properties, acknowledged the foregoing assignment to be her act and deed, both in her own behalf and on behalf of Keenan Properties.

Witness my hand and notarial seal the day and year last written above.

Frank D. Sullivan
Notary Public

My commission expires

FRANK D. SULLIVAN
Notary Public, State of New York
No. 03-3894605
Qualified in Bronx County
Commission expires March 30, 1955

ARTICLES OF INCORPORATION
OF
NORTHWEST DEFENSE MINERALS, INC.

FIRST: That we, the subscribers, James Carey, 3d, whose post office address is 1706 First National Bank Building, Baltimore 2, Maryland, Joseph I. Rheuman, whose post office address is 1706 First National Bank Building, Baltimore 2, Maryland, and Margaret A. Levett, whose post office address is 1706 First National Bank Building, Baltimore 2, Maryland, all being of full legal age, do hereby associate ourselves as incorporators with the intention of forming a corporation under and by virtue of the General Laws of the State of Maryland.

SECOND: The name of the corporation (which is hereinafter called the "Corporation") is

NORTHWEST DEFENSE MINERALS, INC.

THIRD: The purposes for which the Corporation is formed and the business and objects to be carried on and promoted by it are as follows:

(A) To search for, prospect and explore for ores and minerals, and to locate mining claims, grounds, or lodes in the United States of America or the territories thereof, or in foreign countries, and to acquire mining and mineral rights or interests therein when desirable; to mine, quarry, work, extract and develop mining grounds, claims, or lodes, mining and mineral rights; to crush, concentrate, separate, extract, smelt, refine, dress and prepare for market ores, metals and mineral substances of all kinds and to do all

other acts and things necessary or conducive to the company's objects, including erection of buildings or works, and the installing of machinery and appliances of every description whenever required.

To purchase, acquire by lease, license, or otherwise, mining grounds, claims or lodes, mining and mineral rights, concessions or grants, or any interest therein, and to obtain patents therefor when desirable.

To buy, sell, lease and deal in ores and minerals, plants, machinery, separators, dredges, cranes, pumps, boats, scows, tools, implements, groceries, provisions, clothing, boots and shoes, furnishing articles, hardware, wooden and metallic ware, with all other articles and things in any wise required or capable of being used in connection with mining operations, and to make and manufacture such articles when required.

To construct, carry out, maintain, improve, equip, manage, control or superintend any roads, ways, private railways, bridges, reservoirs, water courses, aqueducts, wharves, piers, docks, boatyards, separators, bulkheads, furnaces, mills, crushing, concentrating and extracting works, hydraulic works, factories, dwelling-houses and warehouses; to purchase or lease vessels or other means of transportation except railroads other than private railroads, and equip and operate the same as required for the uses and purposes of the Company, and also to do any other acts and

things relating to mining.

(B) To manufacture, purchase or otherwise acquire, hold, mortgage, pledge, sell, transfer, or in any manner encumber or dispose of goods, wares, merchandise, implements, and other personal property or equipment of every kind.

(C) To purchase, lease or otherwise acquire, hold, develop, improve, mortgage, sell, exchange, let, or in any manner encumber or dispose of real property wherever situated.

(D) To carry on and transact, for itself or for account of others, the business of general merchants, general brokers, general agents, manufacturers, buyers and sellers of, dealers in, importers and exporters of natural products, raw materials, manufactured products and marketable goods, wares and merchandise of every description.

(E) To purchase, lease or otherwise acquire, all or any part of the property, rights, businesses, contracts, good-will, franchises and assets of every kind, of any corporation, co-partnership or individual (including the estate of a decedent), carrying on or having carried on in whole or in part any of the aforesaid businesses or any other businesses that the Corporation may be authorized to carry on, and to undertake, guarantee, assume and pay the indebtedness and liabilities thereof, and to pay for any such property, rights, business, contracts, good-will, franchises or assets by the issue, in accordance with the laws of Maryland, of stock, bonds, or other securities of

the Corporation or otherwise.

(F) To apply for, obtain, purchase, or otherwise acquire, any patents, copyrights, licenses, trademarks, tradenames, rights, processes, formulae, and the like, which might be used for any of the purposes of the Corporation; and to use, exercise, develop, grant licenses in respect of, sell and otherwise turn to account, the same.

(G) To purchase or otherwise acquire, hold and re-issue shares of its capital stock of any class; and to purchase, hold, sell, assign, transfer, exchange, lease, mortgage, pledge, or otherwise dispose of, any shares of stock of, or voting trust certificates for any shares of stock of, or any bonds or other securities or evidences of indebtedness issued or created by, any other corporation or association, organized under the laws of the State of Maryland or of any other state, territory, district, colony or dependency of the United States of America, or of any foreign country; and while the owner or holder of any such shares of stock, voting trust certificates, bonds or other obligations, to possess and exercise in respect thereof any and all the rights, powers, and privileges of ownership, including the right to vote on any shares of stock so held or owned; and upon a distribution of the assets of a division of the profits of this Corporation, to distribute any such shares of stock, voting trust certificates, bonds or other obligations, or the proceeds thereof, among the stockholders

of this Corporation.

(H) To guarantee the payment of dividends upon any shares of stock of, or the performance of any contract by, any other corporation or association in which the Corporation has an interest, and to endorse or otherwise guarantee the payment of the principal and interest, or either, of any bonds, debentures, notes, securities or other evidences of indebtedness created or issued by any such other corporation or association.

(I) To loan or advance money with or without security, without limit as to amount; and to borrow or raise money for any of the purposes of the Corporation and to issue bonds, debentures, notes or other obligations of any nature, and in any manner permitted by law, for money so borrowed or in payment for property purchased, or for any other lawful consideration, and to secure the payment thereof and of the interest thereon, by mortgage upon, or pledge or conveyance or assignment in trust of, the whole or any part of the property of the Corporation, real or personal, including contract rights, whether at the time owned or thereafter acquired; and to sell, pledge, discount or otherwise dispose of such bonds, notes, or other obligations of the Corporation for its corporate purposes.

(J) To carry on any of the businesses hereinbefore enumerated for itself, or for account of others, or through others for its own account, and to carry on any other business

which may be deemed by it to be calculated, directly or indirectly, to effectuate or facilitate the transaction of the aforesaid objects or businesses, or any of them, or any part thereof, or to enhance the value of its property, business or rights.

(K) To carry out all or any part of the aforesaid purposes, and to conduct its business in all or any of its branches in any or all states, territories, districts, colonies, and dependencies of the United States of America and in foreign countries; and to maintain offices and agencies, in any or all states, territories, districts, colonies and dependencies of the United States of America and in foreign countries.

The aforegoing enumeration of the purposes, objects and business of the Corporation is made in furtherance, and not in limitation, of the powers conferred upon the Corporation by law, and is not intended, by the mention of any particular purpose, object or business, in any manner to limit or restrict the generality of any other purpose, object or business mentioned, or to limit or restrict any of the powers of the Corporation. The Corporation is formed upon the articles, conditions and provisions herein expressed, and subject in all particulars to the limitations relative to corporations which are contained in the general laws of this State.

FOURTH: The postoffice address of the principal office of the Corporation in this state is 1706 First National Bank Building, Baltimore 2, Maryland. The resident agent of the Corporation is James Carey 3d, whose postoffice address is 1706 First National Bank Building, Baltimore 2, Maryland. Said resident agent is a citizen of the State of Maryland and actually resides therein.

FIFTH: The total amount of the authorized capital stock of the Corporation is One hundred fifty thousand dollars ($150,000) par value, of which Fifty thousand dollars ($50,000) par value, divided into fifty thousand (50,000) shares of the par value of One dollar ($1.00) each is 5% Cumulative Preferred Stock, and One hundred thousand dollars ($100,000) par value, divided into one million shares of the par value of Ten cents ($.10) each is Common Stock.

SIXTH: The following is a description of each class of stock of the Corporation, with the preferences, voting powers, restrictions, and qualifications thereof:

<u>Preferred Stock</u>

The holders of the Preferred Stock shall be entitled to receive, when declared by the Board of Directors, cash dividends at the rate of five percent per annum, and no more. The first dividend will be payable on September 1, 1954, and subsequent dividends will be payable quarterly thereafter on the first day of the month. Such dividends shall be cumulative and shall be declared and paid or set aside for payment, but without interest, before any dividends shall be declared

and paid or set aside for payment on the Common Stock.

The holders of the shares of Preferred Stock shall have no right to vote at any meeting of stockholders for any purpose, except as may be required by law.

The Preferred Stock may be redeemed in whole or in part, at the option of the Corporation, at any time, at $1.00 a share plus an amount equal to dividends upon such stock at the rate of Five cents (5¢) per share per annum, less the amount of dividends theretofore paid thereon. In the case of the redemption of a part only of the Preferred Stock, the shares so to be redeemed shall be selected by lot in a manner determined by the Board of Directors. At least thirty days' previous notice by mail, postage prepaid, to the holders of record of the Preferred Stock to be redeemed, such notice to be addressed to each such stockholder at his address as it appears upon the books of the Corporation. If the aforesaid notice of redemption shall have been duly given, and if, on or before the redemption date named in such notice, all funds necessary for such redemption shall have been set aside by the Corporation, separate and apart from its others funds, in trust for the account of the holders of the Preferred Stock to be redeemed, then notwithstanding that any certificate of Preferred Stock so called for redemption shall not have been surrendered for cancellation, all shares of Preferred Stock with respect to which the deposit shall have been made shall no longer be deemed outstanding, and all rights with respect to such shares

of Preferred Stock shall forthwith, upon such deposit in trust cease and terminate, except only the right of the holders thereof to receive the redemption price of such shares, but without interest. Preferred Stock which has been retired, whether by redemption or purchase or otherwise, shall not be re-issued and the authorized Preferred Stock shall be deemed to have been reduced by the number of shares thereof so retired.

In the event of any dissolution or winding up of the Corporation, whether voluntary or involuntary, the holders of the Preferred Stock shall be entitled to be paid in full the sum of $1.00 a share plus an amount equal to the dividends upon such stock at the rate of Five percent (5%) per share per annum of the par value thereof, less the amount of dividends theretofore paid thereon, before any distribution or payment shall be made to the holders of the Common Stock. After the making of such payments to the holders of Preferred Stock, the remaining assets of the Corporation shall be distributed among the holders of the Common Stock, and the holders of the Preferred Stock shall not be entitled to participate therein. If upon any dissolution or winding up of the Corporation, the assets of the Corporation are not sufficient to pay to the holders of the Preferred Stock outstanding the full amount to which they are respectively entitled as hereinabove provided, each holder shall be paid an equal proportionate amount on account of each share of Preferred Stock held, up to but not exceeding the full amount to which such holders would be en-

titled with respect to the shares of Preferred Stock held.

Common Stock

Subject to the foregoing provisions relating to dividends on the Preferred Stock, the Board of Directors may declare dividends on the Common Stock from any funds of the Corporation available therefor. Each share of Common Stock shall entitle the holder thereof to one vote.

SEVENTH: The Corporation shall have three directors, and Peggy Keenan, C. Benjamin Mitchell and James Carey, 3d, shall act as such until the first annual meeting, or until their successors are duly chosen and qualify.

EIGHTH: The following provisions are hereby adopted for the purpose of defining, limiting and regulating the powers of the Corporation and of the directors and stockholders:

(1) The Board of Directors of the Corporation is hereby empowered to authorize the issuance from time to time of shares of its stock of any class, whether now or hereafter authorized, or securities convertible into shares of its stock of any class, whether now or hereafter authorized, for such considerations as said Board of Directors may deem advisable, subject to such limitations and restrictions, if any, as may be set forth in the by-laws of the Corporation.

(2) No holder of stock of the Corporation of any class shall be entitled as a matter of right to subscribe

for or purchase any part of any new or additional issue of stock of any class or of securities convertible into stock of any class, whether now or hereafter authorized and whether issued for money, for a consideration other than money, or by way of a dividend.

(3) The Corporation reserves the right from time to time to make any amendments of its charter which may now or hereafter be authorized by law, including any amendments changing the terms of any of its outstanding stock by classification, reclassification or otherwise; but no such amendment which changes the terms of any of the outstanding stock shall be valid unless such change in the terms thereof shall have been authorized by the holders of 66-2/3 per cent. of the shares of such stock at the time outstanding, by a vote at a meeting or in writing with or without a meeting.

IN WITNESS WHEREOF, we have signed these Articles of Incorporation, on August 5, 1954.

JAMES CAREY, 3d

James Carey, 3d

Witness:

JOSEPH I. HUESMAN

Joseph I. Huesman

EMILY F. WEBER

MARGARET A. LOVETT

Margaret A. Lovett

STATE OF MARYLAND)
) SS:
CITY OF BALTIMORE)

I HEREBY CERTIFY, that on this 5th day of August, 1954, before me, the subscriber, a notary public of the State of Maryland, in and for the City of Baltimore aforesaid, personally appeared JAMES CAREY, 3d, JOSEPH I. HUESMAN, and MARGARET A. LOVETT, and severally acknowledged the foregoing Articles of Incorporation to be their act.

WITNESS my hand and notarial seal, the day and year last above written.

MILDRED R. FAIR

Notary Public

My commission expires May 2, 1955.

The undersigned, Peggy Keenan, President of Northwest Defense Minerals, Inc. and James Carey, 3d, Counsel, do hereby certify that the above is a true and correct copy of the charter of the Corporation filed with and accepted by the State Tax Commission of Maryland on August 6, 1954.

Peggy Keenan

Peggy Keenan

James Carey 3d

James Carey, 3d.

August 10, 1954.

August 10, 1954.

For value received the undersigned does hereby assign to Northwest Defense Minerals, Inc., a Maryland corporation, having its principal business office at 2101 S Street, N. W., Washington, D. C., all of her right, title and interest under the contract dated July 16, 1951, with Defense Minerals Exploration Administration (DMEA) Department of the Interior, designated as Docket 654, IDM-E58.

Peggy Keenan d/b/a Keenan Properties

Peggy Keenan, d/b/a Keenan Properties

STATE OF MARYLAND)
) SS:
CITY OF BALTIMORE)

I hereby certify that on August 10, 1954, before me, the subscriber, a notary public of the State of Maryland, in and for the City of Baltimore aforesaid, personally appeared Peggy Keenan, of Washington, D. C., and duly acknowledged the above assignment to be her act and deed.

Witness my hand and notarial seal the day and year last above written.

Mildred R. Fair

Notary Public

My commission expires May 2, 1955

KEENAN PROPERTIES.
Spearfish, South Dakota.

DEPOSITION

Referring to the Deposition dated April 1951, and to the W.O. Fillmore extension on Upper Beaver Creek containing Placer Stream Gravels, the attached map refers specifically to the lode claims covering this W.O. Fillmore extension known as: Harkness, Harkness No.1, Harkness No.2, Harkness No.3, Harkness No.4, Harkness No.5, Harkness No.6, Harkness No.7, Harkness No.8, and are owned by W.O. Fillmore. These 9 Harkness Claims, also known as the W.O. Fillmore lode claims property on Upper Beaver, are bounded on the north by Placer Survey M.S.392, and are a part of the W.O. Fillmore lease dated August 8, 1948, and are included in the DMEA Contract Idm - E58, dated July 16, 1951.

I certify that the above is a true statement.

Peggy Keenan
Peggy Keenan
d/b/a/ Keenan Properties

Subscribed and sworn to before me this 16th day of October, 1952.

Ernest N. McWilliamson
Notary Public, D.C.

AUG 9 - 1954

MF-203
(Revised July 1, 1954)

OWNER'S CONSENT TO LIEN

WHEREAS, the undersigned, as owner, ~~co-owner~~, lessor, ~~or seller~~ has an interest in certain property in the State of South Dakota, County of Lawrence, described as follows:1/

Dakota Tin and Gold Co., placer deposits covered by claims as follows: Oma, Oma Fraction (M.S. 1879), Homeward Bound, Golden Star (M.S. 1879) Lease dated July 17, 1954 - unrecorded.

which is the subject of a proposed exploration project contract, hereinafter called the "contract", between the United States of America, hereinafter called the "Government", and

2/ PEGGY KEENAN d b a KEENAN PROPERTIES
SPEARFISH - SOUTH DAKOTA

hereinafter called the "Operator"; and

WHEREAS, under the provisions of said contract the Government is entitled to a percentage royalty on production and to other rights and equities which do or may conflict with or be adverse to the rights of the undersigned:

NOW THEREFORE, the undersigned, in consideration of said contract and as an inducement to the Government to enter into same, undertakes and agrees as follows:

1. The Government's equity in and right to dismantle, sever, take possession of, and remove and dispose of facilities, buildings, fixtures, equipment, or other items as provided in the contract or any amendment thereof shall prevail over and be prior and superior to any conflicting or adverse rights of the undersigned, and the Government is authorized to enter upon the land for such purposes.

2. To secure the payment to the Government of the percentage royalty on production3/ provided for under the terms of said exploration project contract or any amendment thereof there is hereby granted to the Government a lien upon the land above referred to and upon any production of minerals therefrom until said royalty is fully paid or ten years have elapsed from the date of the contract, whichever occurs first.

1/ Either (a) insert the legal description of the land, or (b) strike out the words "as follows" and insert "in a lease [or contract, deed, or other document] dated _____, and recorded in book _____ page _____ official records of said county." If (b) is used, the book and page of recordation cannot be dispensed with. If the space provided is insufficient, use an Annex, and refer to the Annex in the space.

2/ Insert the name of the Operator as it will appear in the exploration project contract.

3/ Mining or production from the land is not required, and in the absence of production there is no obligation to repay the Government.

(OVER)

3. The undersigned shall commit no act nor assert any claim that may contravene or conflict with the lien, claim, or rights of the Government under the provisions of said contract. This agreement shall be binding upon the heirs, executors, administrators, successors, and assigns of the undersigned.

4. Changes and added provisions _____

_____

_____

_____

Dated this 26th day of July, 1954.

DT Dakota Lin & Gold Co [Seal]

Lillian G. Gillmore [Seal]

Sec. [Seal]

Seal

MF-203

OWNER'S CONSENT TO LIEN

WHEREAS, the undersigned, as owner, co-owner, lessor, or seller has an interest in certain property in the State of Wyoming, County of Crook, described as follows:1/

Sand Creek Placers, comprising two hundred forty acres on Sand Creek

which is the subject of a proposed exploration project contract, hereinafter called the "contract", between the United States of America, hereinafter called the "Government", and

2/ Keenan Properties, Spearfish, South Dakota

hereinafter called the "Operator"; and

WHEREAS, under certain provisions of said contract which are set forth on the reverse side hereof, the Government is entitled to a percentage royalty on production and to certain other rights and equities which do or may conflict with or be adverse to the interest of the undersigned in said property;

NOW THEREFORE, the undersigned, in consideration of said contract and as an inducement to the Government to enter into same, undertakes and agrees as follows:

1. The Government's equity in and right to dismantle, sever, take possession of, and remove and dispose of facilities, buildings, fixtures, equipment, or other items as provided in the contract, or any amendment thereof, shall prevail over and be prior and superior to any conflicting or adverse rights of the undersigned, and the Government is authorized to enter upon the land for such purposes.

2. To secure the payment to the Government of the percentage royalty on production3/ provided for under the terms of said exploration project contract, or any amendment thereof which does not increase the maximum amount of the Government's claim here stated or alter the provisions for repayment, there is hereby granted to the Government a lien upon the land herein described and upon any production of minerals therefrom, until the royalty claim is fully paid in the amount of the Government's contribution, not in excess of 4/$ 90 % of total, or ten years have elapsed from the date of the contract.

3. The undersigned shall commit no act nor assert any claim that may contravene or conflict with the lien, claim, or rights of the Government under the provisions of said contract. This agreement shall be binding upon the heirs, executors, administrators, successors, and assigns of the undersigned.

Dated this 21st day of June, 1952.

A B Fillmore [Seal]

Peggy Keenan [Seal]

[Seal]

1/ Either (a) insert the legal description of the land, or (b) strike out the words "as follows" and insert "in a lease [or contract, deed, or other document] dated _____, and recorded in book _____ page _____ official records of said county." If (b) is used, the book and page of recordation cannot be dispensed with. If the space provided is insufficient, use an Annex, and refer to the Annex in the space.

2/ Insert the name of the Operator as it will appear in the exploration project contract.

3/ Mining or production from the land is not required, and in the absence of production there is no obligation to repay the Government.

4/ Insert the maximum amount of the Government's contribution.

RELEVANT CONTRACT PROVISIONS

Repayment by Operator. (a) If, at any time, the Government considers that a discovery or a development from which production may be made has resulted from the exploration work, the Government, at any time not later than six months after the Operator has rendered the required final report and final account, may so certify in writing to the Operator. The certification shall describe broadly or indicate the nature of the discovery or development. In the event of such certification, any minerals mined or produced from the land described in Article 2 within 10 years from the date of this contract, including any mined or produced before the certification, shall be subject to a percentage royalty which the Operator or his successor in interest shall pay to the Government, upon the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production, in whatever form disposed of, including ore, concentrates, or metal, until the total amount contributed by the Government, without interest, is fully repaid, or said 10 years have elapsed, whichever occurs first, as follows:

(1) One and one-half (1½) per cent of any such net amounts not in excess of eight dollars ($8.00) per ton.

(2) One and one-half (1½) per cent of any such net amounts, plus one-half (½) per cent such net amounts for each additional full fifty cents ($0.50) by which such net amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) per cent of such net amounts.

(For instance: the percentage royalty on a net amount of five dollars ($5.00) per ton, would be one and one-half (1½) per cent; on a net amount of ten dollars ($10.00) per ton, three and one-half (3½) per cent.)

(b) As here used, "net smelter returns", "net concentrator returns", and "other net amounts realized from the sale or other disposition", mean gross revenue from sales; or if not sold, the market value, the market value of the material after it is mined in the form in which and the place where it is held. In the case of integrated operations in which the material is not disposed of as such, these terms mean what is or would be gross income from mining operations for percentage depletion purposes in income tax determination.

(c) To secure the payment of its percentage royalty, the Government shall have and is hereby granted a lien upon the land described in Article 2 and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

(d) This article is not to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

Title to and disposition of property. All facilities, buildings, fixtures, equipment, or other items costing more than $50.00 each, paid for or purchased with funds contributed jointly by the Operator and the Government, although title may be taken in the name of the Operator, shall belong to the Operator and the Government jointly, in proportion to their respective contributions, and upon the completion of the work or the termination of the contract shall be disposed of promptly by the Operator for the joint account of the Government and the Operator, either by return to the vendor, by sale to others, or purchase by the Operator at a price at least as high as could otherwise be obtained, as may appear to be for the best interest of the Government, unless the Government, in writing, waives its interest in any such item. If necessary to accomplish such disposition, the Operator shall dismantle, sever from the land, and remove any such item, the cost thereof to be for the joint account of the parties in proportion to their respective interests. If the Operator, within 90 days after the receipt of written notice from the Government, fails, neglects, or refuses to dispose of such property, the Government may itself enter upon the land, take possession of, and remove and dispose of any such property as above provided.

C
O
P
Y

Mines
Lawrence County, Tinton, S.D.

BLACK HILLS TIN COMPANY
Suite 1940
332 South Michigan Avenue
Chicago 4, Ill.

October 17, 1952

EXCERPT FROM WARRANTY DEED FROM BLACK HILLS TIN COMPANY TO ALFRED J. SLEEP, DATED APRIL 26th, 1950, COVERING PLACER CLAIM #393, ALSO KNOWN AS SEVENTY FLATS - RECORDED IN THE COUNTY OF LAWRENCE, SOUTH DAKOTA, NOVEMBER 27, 1950, IN BOOK 309 AT PAGE 542.

"Grantor reserves the rights to placer mine, build dams, erect buildings, run pipe lines, pump water all incidental to placer mining on the above described property or on the adjacent area or to provide water for mining operation in Tinton, S. Dakota, and the Grantor agrees to back fill all land placer mined."

EDS:AAD 7/11/52 1:4cc

C
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P
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MINING LEASE AGREEMENT

This Agreement made October 17, 1952, at Chicago, Illinois, by and between BLACK HILLS TIN COMPANY, a Delaware corporation having its principal offices at 332 South Michigan Avenue, Chicago 4, Illinois, hereinafter referred to as Lessor; and PEGGY KEENAN, d/b/a/ KEENAN PROPERTIES, having its principal offices at Spearfish, South Dakota, and hereinafter referred to as Lessee;

W I T N E S S E T H:

WHEREAS, Lessor owns or controls a certain Placer Mining Claim under and by virtue of the warranty deed more fully described herein, situated in Lawrence County, South Dakota, and known as MS-393 (70 flats on Bear Creek) comprising approximately 138.27 acres; and

WHEREAS, Lessee desires to explore and develop the placer gravels contained in said Claim MS-393 for the purpose of checking and assaying the minerals and metals there contained, in preparation for a mining operation as soon as possible after the values are proven commercial;

NOW, THEREFORE, in consideration of the mutual agreements herein contained, and for other good and valuable consideration, the receipt whereof is hereby acknowledged, the parties agree as follows:

1. Lessor hereby demises and leases to Lessee all

of its placer mining rights in and to Placer Claim Lot No. 393 in Rawlins District, located in Lawrence County, South Dakota, as more fully described in that certain warranty deed from Lessor to Alfred J. Sleep, dated April 26, 1950, and recorded with the Register of Deeds for Lawrence County, South Dakota, November 27, 1950, in Book 309 of Deeds, at Page 542, said lease to continue for one year from date. Lessee shall have the option to extend said lease for two additional periods of one year each, which options shall be exercised by Lessee delivering to Lessor written notice of such intention at least sixty (60) days before the end of each prior lease year, provided that at the time of exercising said option the Lessee shall have fully performed all of its covenants and agreements hereunder and is not in default.

2. Lessee agrees to use the services of an expert and recognized placer engineer, with the aid of Government engineers and facilities for exploration and development of the placer gravels in MS-393, during the year 1952 and as soon as feasible thereafter to operate a placer mining recovery unit now engineered and designed.

3. The Lessee agrees to pay to the Lessor ten per cent (10%) of the gross income from the sale and production of all of the minerals and metals derived from the operation of the stream gravel placer recovery in quarterly payments, which payments shall be made to Lessor on or before the 10th of the month following their receipt by Lessee.

4. The Lessee agrees to keep accurate records and to render a statement quarterly to Lessor, and Lessor may examine Lessee's records and accounts of this project at any reasonable time.

5. The Lessor grants to the Lessee use of the water rights on the MS-303 (70 flats on Bear Creek) and grants to the Lessee the exclusive right to go upon the above described premises at any and all times with necessary tools, vehicles and equipment, mining or otherwise for the purpose of developing, prospecting, or mining of all minerals, metals and/or concentrates which may contain tin, columbite, tantalite, tungsten or gold. It is agreed that all equipment remains the property of the Lessee. Lessee shall have the right to remove such equipment at any time.

6. Lessee is to have the free and uninterrupted use of all roads built and in use on said premises during the period of this Lease Agreement and Lessee shall have the right and privilege hereby to erect such washing and concentrating plants, sluice ways, pipelines, buildings, telephone or high line cable and to do all other things as may be deemed necessary to the proper carrying out of mining operations upon the premises above described.

7. Lessee hereby agrees to and does assume responsibility and liability for all damages and injuries to persons and property which may in any way result from carrying on mining operations under the terms of this

Lease Agreement. It being understood that Lessor may erect and post such notices of non-responsibility and non-liability in connection with the mining operations as carried on under the terms of this Lease, as may be necessary to protect the said Lessor.

8. The Lessee's rights hereunder shall be coextensive with, but in no event shall they exceed the rights to placer mine and otherwise develop the said property as reserved by Lessor in its above described warranty deed to Alfred J. Sleep, dated April 26, 1950. Lessee accepts and is bound by all obligations of Lessor under said warranty deed and agrees to back fill all land placer mined in that area at its expense. This Lease shall not be assigned by Lessee without the prioer written consent to Lessor.

9. The Lessee is to have the right of immediate possession to the premises and property herein the subject of this Lease upon the execution of this Agreement.

10. Lessee hereby agrees to advise Lessor from time to time, and upon its request, of the results of the exploration and development work to be accomplished in 1952.

11.. Time is of the essence of this Agreement. This Agreement shall be binding upon both parties hereto, their successors, assigns and legal representatives.

12. The parties hereto hereby state that a true and correct copy of the above and foregoing Agreement was delivered to them at the time of execution of this Agreement and further that they acknowledge receipt of the same.

IN WITNESS WHEREOF we have hereunto set our hands and seals on this 17 day of October 1952.

BLACK HILLS TIN COMPANY, Lessor

By /s/ Ross J. Beatty, Jr.
Its President

ATTEST:

/s/ Edward A. Brophy
Its Secretary

KEENAN PROPERTIES, Lessee

By /s/ Peggy Keenan d/b/a/
Its President

ATTEST:

/s/ Ruth Soody
Its Secretary

STATE OF ILLINOIS)
SS:
COUNTY OF C O O K)

On this 17th day of October 1952, before me Julia Kovalik a Notary Public in and for said County and State, personally appeared ROSS J. BEATTY, JR., known to me to be the president of BLACK HILLS TIN COMPANY, the corporation that is described in and that executed the foregoing instrument, and acknowledged to me that said corporation executed the same as its free and voluntary act and deed.

/s/ Julia Kovalik
Notary Public

My Commission expires: 7-25-54

District of Columbia)
SS:
City of Washington)

On this 21st day of October, 1952, before me Katherine Kallivas a Notary Public in and for said District of Columbia, personally appeared PEGGY KEENAN, known to me to be the president of KEENAN PROPERTIES, an individaul who is described in and that executed the foregoing instrument, and acknowledged to me that said individual executed the same as her free and voluntary act and deed.

/s/Katherine Kallivas
Notary Public

My Commission expires: Dec. 31, 1953

COPY

LEASE AGREEMENT

This agreement made and entered into this 17th day of July, A. D., 1950, by and between the Dakota Tin & Gold Company, a South Dakota corporation, Lessor of Spearfish, South Dakota, and Peggy Keenan, Lessee of Spearfish, South Dakota, as follows, to-wit:

WITNESSETH

WHEREAS, the Lessor is the owner of certain mining property situate in Lawrence County and known as the Homeward Bound Claim, the Homeward Bound Fraction, and part of the Mineral Survey %1879, including the George, George No. 1, George No. 2, George No. 3, the Golden Star, Golden Star No. 1, Golden Star No. 2, the Oma, the Oma Fraction; and the Jarosh Claims, including the Jarosh, Jarosh No. 1, Jarosh No. 2, Jarosh No. 3, Jarosh No. 4, Jarosh No. 5, Jarosh No. 6, Jarosh No. 7, Jarosh No. 8.

AND WHEREAS, the Lessee is desirous of prospecting the said real estate for minerals and developing said mining claims and extracting ores and minerals therefrom;

NOW THEREFORE, in consideration of the mutual considerations herein contained and other good and valuable considerations, the parties to this Agreement hereby agree as follows, to-wit:

-1-

Lessor hereby grants to Lessee, her heirs and assigns, the exclusive right to go upon the above-described premises at any and all times, by herself or through her agents, employees and assigns with the necessary tools, vehicles and equipments, mining or otherwise, for the purpose of developing, prospecting, and of mining any and all minerals and ores.

-2-

Lessee is to have the free and uninterrupted use of all roads built and in use upon said premises during the period of this lease

Agreement and Lessee shall have the right and privilege hereby to erect such other and additional roads, sluice ways, pipe-lines, buildings, telephone or cable and to do all other things as may be deemed necessary to the proper carrying out of mining operations upon the premises above described.

-3-

Lessee hereby agrees to mine Feldspar and other Minerals upon said mining property owned and controlled by Lessor, and may erect such plants and buildings as necessary for the sampling and treatment of all ores and minerals whether mined on the premises or not.

-4-

Lessee is hereby given the right and privilege of cutting and using all such timber upon non-patent claims of said premises as may be necessary for the proper carrying out of the mining and milling operations above described. Seventy-five percent of the merchantable timber over twelve inches diameter, breast height, on the patent ground shall be excluded and the Lessor shall have the right to sell or dispose of it in any manner that they shall see fit. And this lease shall in no way obstruct the building of roads or removing of such timber from the patented property covered by this lease. Lessee shall be notifed of the desire of Lessor to sell such timber and may have first option on same which must be consummated within 10 days of time of notification.

-5-

Lessee hereby agrees to and does assume responsibility and liability for all damages and injuries to persons and property which may be the direct result of the mining operations carried out under the terms of this Lease Agreement. It being understood that Lessee shal erect and post such notices of non-responsibility and non-liabilities in connection with the mining operations as carried on under the terms of this Lease, as may be necessary to protect the said Lessor.

-6-

Lessee herein shall have the privilege of bringing upon the premises above described any and all mining equipment and materials

as may be necessary for the successful carrying out of mining operations under the terms of this lease.

It being understood and agreed by the parties hereto that any such material and equipment that is brought upon the premises as aforesaid, shall remain the exclusive property of the lessee, and that lessee shall at all times have the right and privilege to remove the same either during or upon the termination of this Lease, whether the same be regarded by the Law of this State as fixtures or not.

It being also understood that upon the termination of this lease and in the event that the Lessee should see fit to sell such equipment, that the Lessee will first offer the same to the Lessor at a price to be mutually agreed upon by the parties hereto, the offer to be in effect for a period of ten days from date of offer."

-7-

It is further agreed herein that the event the lessee shall see fit to contact with Utility Companies for the furnishing of electrical power, that the Lessor will immediately and upon demand of the Lessee grant such utilities as may be by the Lessee determined, sufficient necessary easements to the above-described property as may be demanded by the said Utility Companies.

-8-

It is understood and agreed by the parties to this Agreement that under the terms of this lease, the lessee shall have the right and privilege of using all mining equipment now owned by the lessor and situated upon the premises above-described, during the life of this lease, and as long as lessor has control of said mining equipment.

-9-

The lessee, in consideration of the privileges and rights above granted hereby agrees to pay to the lessor a royalty of ONE DOLLAR for each tone of any Feldspar ores mined, processed and sold from Dakota Tin & Gold Company, and to further pay royalty on all

other ores and minerals mined, processed and sold from Dakota Tin & Gold Company property at the rate of Ten (10) percent of the gross value on such ores having a gross value up to Ten ($10.00) Dollars per ore ton, and a royalty of 12-1/2% of the gross value on all ores having a gross value of over Ten ($10.00) Dollars per ore ton.

-10-

The lessor shall have the right to remove from the premises hereinbefore described any such mining equipment and materials as are not used by the lessee. An invoice of the equipment to be retained by the lessee, to be invoiced and agreed upon by the parties hereto within 60 days of the signing of this lease.

It is further agreed that the lessee shall return all materials and equipment used by her in as good condition as when received, less reasonable wear and tear, at the termination of this Lease.

It is further agreed that the lessee shall see that the materials and equipment left on the premises above-described by the Lessor are properly stored until removed by the Lessor or until the termination of this lease.

The lessor shall have the right to go upon said premises at any or all times and shall have the privilege of inspecting any work above or below ground being done on the property and if he so deems necessary, to install a watchman on the place if property is abandoned.

-11-

In the event that the Lessee shall deem it advisable to process or mill upon said premises of this lease other ores or minerals not mined or found upon the said premises, the lessee will pay to the lessor the sum of Ten Cents (10¢) for each ton of Feldspar ores found outside the premises, processed and sold therefrom, and 1% of the gross value of all other minerals that may be found outside and brought upon the premises, processed and sold.

-12-

The Lessee is to have the right of immediate possession to the premises and property herein the subject of this Lease upon the execution of this Agreement.

-13-

The period of this lease shall be from year to year, beginning on July 16th, 1950, at a yearly rental of $1200, payable in advance upon the execution of this lease, and a similar sum on the 16th day of July hereafter during the life of this lease, together by the payment during each calendar year of all royalties in excess of $1200, each year, accruing under the terms of this lease, and upon the payment of such rentals in advance and keeping and performing of all of the covenants of this lease by the lessee or her assigns this lease shall remain in full force and effect.

-14-

Lessee agrees to render the Lessor quarterly a true and exact statement of the amount and type of ores mined and sold from Dakota Tin & Gold Company under this agreement, the quantity of said ores to be determined by the weights of the railroad company or other transporting agency, transporting the same from the area in which such ores are mined.

-15-

The payment of royalty under the terms of this Agreement in excess of the $1200 yearly cash rental shall be monthly thereafter.

-16-

All payments are to be made under the terms of this Agreement by depositing the amounts due to the account of Lessor in the First National Bank of the Black Hills, Spearfish Office, Spearfish, South Dakota.

-17-

Time is of the essence of this agreement. This Agreement shall be binding upon both parties hereto, their heirs, assigns, and legal representatives.

The parties hereto hereby state that true and correct copy of the above and foregoing Agreement was delivered to them at the time of execution of this Agreement and further that they acknowledge receipt of the same.

This Lease shall not be binding upon the lessor until signed by the president and secretary of said corporation and the corporate seal affixed hereto.

IN WITNESS WHEREOF we have hereunto set our hands and seals on this the date first above written.

DAKOTA TIN & GOLD COMPANY, a corporation,
Lessor

By /s/ Bert LeBron
President.

Attest:

/s/ Lillian G. Fillmore
Secretary

(Seal)

/s/ Peggy Keenan
Peggy Keenan - Lessee

STATE OF ILLINOIS)
) ss
COUNTY OF)

On this ____ day of _____, ____, before me, _____, personally appeared Bert LeBron, known to me to be the president of the corporation that is described in and that is described in and that executed the within instrument and acknowledged to me that such corporation executed the same.

_____
Notary Public

My commission expires

_____.
(Seal)

On this _____ day of _____, _____, before me C. R. McCain, personally appeared Lillian G. Fillmore, known to me to be the secretary of the corporation that is described in and that executed the within instrument and acknowledged to me that such corporation executed the same.

/s/ C. R. McCain
Notary Public

(Seal)
My commission expires

_____.

STATE OF NEW JERSEY)
) ss
COUNTY OF ESSEX)

On this the ____ day of _____, _____, before me _____, the undersigned officer, personally appeared Peggy Keenan, known to me or satisfactorily proven to be the person whose name is subscribed to the within instrument and acknowledged that she executed the same for purposes therein contained.

In witness whereof, I hereunto set my hand and official seal.

_____
Notary Public

(Seal)
My commission expires

_____.

For value received the undersigned, Peggy Keenan, both individually and doing business as Keenan Properties, does hereby sell, assign and transfer all of her right, title and interest in and to the within lease to Northwest Defense Minerals, Inc.

/s/ Peggy Keenan
Peggy Keenan

August 11, 1954.

Form MF-100
(May 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

GENERAL TECHNICAL DATA FOR USE UNDER THE DEFENSE PRODUCTION ACT OF 1950

NOT TO BE FILLED IN BY APPLICANT

Docket No. _____

Date received _____

Name and address of applicant

Date _____

INSTRUCTIONS

This form is to be filed with Defense Minerals Administration, Department of the Interior, Washington 25, D. C. It should be accompanied by appropriate application form when a specific type of Government assistance is requested, in the form of (1) loan, (2) purchase contract, (3) Government guarantee of a private loan, (4) priorities or allocation of mining equipment, and maintenance, repair and operating supplies, and (5) other forms of Government assistance that might arise under the Act. Submit four (4) signed copies of the form and accompanying papers. Name and address should be stamped or typed on each sheet of this form and all accompanying papers. *When a question is inapplicable it should be so stated on the form.* Additional sheets may be attached in answering any questions or in supplying additional information. (IF YOU CANNOT ANSWER A QUESTION, SO STATE.) If a question is answered elsewhere indicate where answered. It is not necessary to answer it again.

GENERAL TECHNICAL DATA

Supply the following information on separate sheets, arranged, numbered, and lettered as indicated:

1. Materials produced:
   (*a*) What are the chief mine, mill, or smelter products?
   (*b*) What are the byproducts, if any?
2. Name(s) and type(s) of mine(s), mill(s), smelter(s), refinery(ies), pit(s), quarry (ies), drilling operation(s). Include old names of property, if any. Show extent of workings, including the following:
   (*a*) Linear feet of shafts.
   (*b*) Linear feet of drifts and crosscuts.
   (*c*) Linear feet of tunnels or adits.
   (*d*) Linear feet of other mine openings (explain briefly).

   Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity.
3. For each operation listed above supply the following:
   (*a*) Distance and direction from nearest town and shipping point.
   (*b*) Mining district.
   (*c*) Township, Section, Range.
   (*d*) County, State.
4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated.
   (*b*) Are you operating this property as:
   - ☐ Owner.
   - ☐ Lessee.
   - ☐ Contractor.
5. Number of years in production _____

   If not in production or operation, estimated date when production will begin _____
6. Experience of operators:

   Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who manage the project.
7. History:
   (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for suspension of operation.
   (*b*) State briefly the known history and production of adjoining and neighboring properties.
   (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

GENERAL TECHNICAL DATA

KEENAN PROPERTIES, DOCKET 654X

SUPPLEMENTARY TO FORM MF-103

1. Materials produced:

   (a) The chief products from the Placer Gravel deposits are:

   Columbium
   Tantalum
   Tin
   Tungsten
   Gold

   (b) The by-products are: (10-30 mesh)

   Hematite
   Ilmenite
   Limonite
   Magnatite
   Garnet

2. Keenan Properties Co. is the firm name.

   Placer deposits (also lode claim ore deposits.)

   The Mill building was operated only for processing concentrates from Keenan Properties gravel testing pilot plant 1948, 1949. (The mill was built by Dakota Tin and Gold Co. for treatment of feldspar, was not operated.)

   The workings prior to 1947 by Dakota Tin and Gold, Connors' Tin Co., etc., were exploratory and no production was accomplished due to low prices and the death of Mr. Connors by drowning.

   (a) There is a 2 compartment shaft 8' x 20' x 135' under the mill. The shaft passed through a tungsten ore deposit reportedly for 70'. Another shaft on the south hill is 60' deep on a feldspar-tin ore dike.

   (b) At the bottom of the 135' shaft, there is a cross cut 150' passing through a feldspar-tin vein.

   (c) The tunnel is 292' on the 60' level in feldspar-tin ore. In early days 5 tons of tin ore were shipped to the Pempole Smelter, assayed 15% tin. In 1948 Keenan Properties re-opened the tunnel and explored the feldspar-tin ore veins.

(d) There is a 60' shaft on a gold vein 100' from the 135' shaft. The gold ore reportedly assayed $60 a ton. The 135' shaft and the 150' cross cut are flooded.

3. (a) The above deposits are approximately 14 miles from Spearfish, South Dakota. The RR loading platform is 15 miles distant at Cheyenne Crossing on the Chicago and Northwestern R.R.

(b) Rawlins Mining District.

(c) T5 R1E, Sections 7, 8, 9, 10, 16, 17, 18, 19, 20, 21, 29, 30.

(d) Lawrence County, South Dakota.

4. (a) The property is in process of exploration and development.

(b) The properties are controlled by mining leases, the leases are owned by Keenan Properties Co., and are held by advance royalties paid.

5. There has been a pilot plant recovery only in stream gravel. An average of 100 or more assays: Tin 30%, Columbium-Tantalum 8-10%, Tungsten 3-7%, plus 14 oz. gold per ton of concentrates. Production is expected this year in September 1952 on the properties explored by Dmea Project Idm-858 in 1951.

6. The president and Resident Manager has for 4 years been consolidating and exploring the properties in conjunction with associates and engineers. Previous experience of operator; co-invented and developed plastic flooring and ships' decking. Spent childhood with father developing copper and oil properties. Seven years successful career in radio broadcasting - NBC, CBC, Mutual. The operator has for 4 years supervised the exploration and development of the Placer deposit by pilot plant operation, testing, engineering, assaying, and the 1951 DMEA testing and engineering work.

7. History:

(a) The underground exploration and gold panning in the streams began when the initial gold rush to the area was in progress. A group of hard rock miners and associates (Dakota Tin and Gold Co., Connors Tin Co., Bear Gulch Mining Co.) explored the above described placers, shafts, tunnels, and many discovery holes on feldspar-tin ledges, gold veins and in the adjoining properties - Columbium-Tantalum and Lithium from Spodumene. World War II and lack of capital interferred with operation or production. From 1931-1943 W. C. Driskill, engineer, explored the stream gravel deposits with small equipment. He recovered tin in commercial quantities,

columbium-tantalum, gold, for Fansteel Metallurgical Co. In 1947 he was engaged to re-check the deposits for Keenan Properties and the report was submitted to General Services Administration.

Beginning 1900-1904, Milton Connors explored 500 acres now leased to Keenan Properties. About $100,000 was expended on shafts to 75' depth, inclines and discovery holes. Many of these dumps were checked by Keenan Properties in 1951 as well as the Florence properties. Some of the samples were sent to Oscar N. Bribach, Aurora, Colorado. A spectograph of the Florence properties indicated beryllium, tin, and rutile (titanium) and feldspars. The College Park Laboratory of the Bureau of Mines preliminary analysis (1952) reports mica, quartz, feldspar, and the heaviest showing of cassiterite on the Elizabeths and Connors.

In 1949 a 4' talc ledge was discovered. An analysis showed 1.1% Columbium per ton of ore. The exploration indicated the ledge widens to 9' and assays .5% tin, .07 oz. gold per ton.

A preliminary exploration of an 80' cut on the Florence properties in 1951 indicated beryllium and rutile (titanium). The High Bar gravel placers deposited by a pre-historic river, was excavated to a depth of 19' in 1951, assayed as follows: (4 pans gravel near bedrock concentrated to 34 grams.)

Au (mg)	WO_3%	Cb_2O_5%	Ta_2O_5%	Sn %
0.44	.01	2.7	1.4	4.5

In 1949 gravels were explored by a pilot plant operation and confirmed a re-check of values by W. C. Driskill 1949 values. The cost of this exploration was $30,000. (See attached report)

(b) The Black Hills Tin Co. adjoining Keenan Properties has reportedly spent large sums of money on exploration, roads, a small town, high line, water systems, and mills. They recovered lithium, columbium, feldspar and tin.

The Homestake Mine is 8 miles East.

The Mineral Hill Gold Property adjoining Keenan Properties built a gold mill near Welcome. The death of the owner stopped further exploration.

Reportedly 5 million in gold was recovered in nuggets from surface panning of gravels, now a part of Keenan Properties, but scientific recovery was not instituted. Tin and columbium was present in commercial quantities in the discarded gravel. Low prices and lack of modern processes made recovery unattractive.

(c) See attached reports:

W. C. Breadgate
W. C. Driskill
Fansteel Metallurgical Co. Data
Earl W. Amundsen, Engineer
Pilot Plant Report and Work Sheet
Photostats of "Ratio of Tin to Tungsten"

Refer to the following Government documents re the Keenan Properties:

U.S. Bureau of Mines I.C. 6846, 7013, 6786, p. 20.

U.S.G.S. Bulletins 922T, p. 597, 599, 606, 607, 610, 612, 613, 616, and 627.

U.S. Bureau of Mines Report R.I. 4484, p. 7.

8. (a)

(1) Refer to W. C. Breadgate report.

(2) Refer to Map "A" with Phase 1 area in green, Phase 2 area in red.

W. W. Johnson data and maps.

W. C. Driskill data and maps.

(3) The gravel is a mixture of fine and medium with approximately 70% minus 4", and less than 1% boulders of from more than 12" diameter. The gravel is loose and easily worked, contains some stumps and trees.

(4) The bedrock is mainly decomposed schist and porphyry. It is soft and can be cut 6" - 12" with a bulldozer, where important values are found. The bedrock is rolling.

(5) Overburden is loose, medium-fine material, free from clay, varying from 6" to 4' in depth, and totalling approximately 4% of Phase 1 gravels. (4% of 500,000 cubic yards or 20,000 cubic yards). The overburden estimated indicated in the total placer reserves is 6%. See form 12, (b), (2) "Mineral Reserves", which supplements (12), (e), (6).

9. Supply Points:

Spearfish is 14 miles distant, it is not on the RR, but is supplied by motor lines. Cheyenne Crossing is 15 miles distant where there is a loading platform on the Chicago and Northwestern RR.

The roads are excellent gravelled county roads, well maintained all year.

10. The streams are supplied by winter snows and many underground springs and gulches. Engineers previously engaged to explore the properties advise 2 dams on the upper streams to impound a minimum of 4 million gallons of water for a semi-portable placer plant. The water would be re-used from settling ponds below the plant using 8" pumps for re-supply. Water storage at these dams will receive approximately 300 gallons per minute fresh water during dry season.

11. Power is available from a high line which crosses many of Kseman Properties' claims and crosses Potato and Bear Creeks. The highline is within 1800' of the mill. The rate is 1¾¢ per kw.

12. Labor:

During the 1949 placer testing with pilot plant recovery and a trenching test pit survey, from 5-12 men were employed. During the DMFA exploration in 1951, between 5 and 12 men were employed. The types used were: Caterpillar operator, dragline operator, truck driver, panner, sampler, jig man, helpers, engineers, superintendent, cook. The operator was the supervisor.

13. Attached are:

1. List of leased inventory. The buildings are in good condition, except the blacksmith ship. Some repairs and improvements are necessary to make the cabins and commissary more operable.

2. List of Keenan Properties owned equipment.

3. List of equipment on loan from W. O. Fillmore.

4. List of Keenan Properties owned equipment purchased for the 1951 testing and exploration.

NOTE: Important items of equipment for immediate production are: Pan American rougher jig, Denver Equipment Mineral jig, pumps, engines, small truck, caissons, chain blocks.

14. No conditions to report.

Note:

A careful reading of the Driscoll and Amundsen reports on sampling and a comparison of the similarity of the results obtained during the Keenan, Driscoll and Amundsen work with the values shown in the Johnson "composite" sample leads to the following observations:

(a) The recovery method used and particularly the operation of the jib during the Johnson sampling resulted in the recovery of fair gold values but much loss of the lighter minerals.

(b) The Johnson ratio of concentration was not sufficiently high, resulting in "trace" and "nil" reports, although, with a high ratio of concentration such as was employed by Johnson in the single, more reliable "composite" sample, positive results were obtained which were very encouraging and closer to the Keenan, Driscoll and Amundsen work, which used high concentration ratios.

It is recommended particularly that the sampling practices used in phase 2 be adjusted to correct these poor techniques.

Wm C Brangale

NOTES ON KERMAN PROPERTIES LODE CLAIM DEPOSITS.

The 87 lode claims, which have been consolidated to make Kerman Properties, contain many Pegmatite dikes which are principally coarse-grained intergrowths or massive segregations of feldspar, quartz and mica. Some dikes contain notable amounts of cassiterite, columbite, tantalite, spodumene (lithium), veins of gold and veins of tungsten and talc.

The Geology of the area is as follows:

Quarternary: Alluvium
Terrace Gravels.

Tertiary: Lamprophyre dikes
Pseudo-leucite bearing and nephaline-bearing intrusive rocks.
Monzonite and Syenite porphyry.

Paleozoic: Deadwood formation (Cambrian)
Whitewood Limestone (Ordovician)
Englewood Limestone (Carboniferous) undefferentiated.

Pre. Cambrian:
Pegmatite
Tin-bearing Pegmatite
Quartz-mica schist and Hornblend schist.

Reference: See U.S.Geological Survey Bulletin 922 T.

MS 1787, CONNERS GROUND A PART OF KEENAN PROPERTIES (558 ACRES)

During the period of the initial gold rush to the Black Hills of South Dakota, much gold was recovered by hand panning from the gravels on the streams, now controlled by Keenan Properties.

Before 1895, Conners Ground, comprised of 558 acres, was purchased from a group of ocaters. The following condensed data was printed as a brochure about 1904 by Milton C. Conners:

Twenty years ago Milton C. Conners, senior, a wealthy cattleman of Spearfish, S. D."became interested in a large body of mining ground in Bear Gulch district on the boundary line between Wyoming and South Dakota, in Lawrence County, comprising 558 acres. Placer miners engaged in placer mining for gold were annoyed by finding the riffles in their sluice boxes filled up with little black cubes. For several years they complained of being bothered with chunks of black 'iron' about the size of a grain of wheat and the specific gravity of which was so near that of gold that it accumulated in the riffles and filled them up. One day a Cornish miner happened in and upon looking at the strange mineral at once proclaimed it to be stream tin. Search was at once made for the edges from whence the stream tin came, in the adjoining mountains and resulted in a veritable mountain of tin stone, afterwards proclaimed by English experts to be the true tin stone similar to that of Cornwall, England, but remarkably pure and free from those substances usually found in Cornwall tin stone that makes it so difficult to smelt."

Expenditure of $60,000 followed his purchase, in exploration by many shafts and tunnels revealing "ore bodies to an extent almost beyond calculation." Mr. Conner's death curtailed plans for a 500 ton a day tin reduction plant. In the 10 years after, his sons spent another $50,000 in development and the ores were exhibited at World's Fairs in Chicago andSt. Louis. We quote: "The most inexperienced can with a bare pick and shovel in five minutes time on almost every separate acres of the 558 acres--uncover and disclose tin--bearing stone."

Assays from the 75' shaft disclosed 11.07% tin (Ricketts & Banks New York, Dec. 21, 1904). The report reads that no ore assayed less than 40% tin when shipped to various reduction plants at Denver and elsewhere. Tin was worth 30¢ per lb.

The report states that scientists such as Professor Alonzo Chase of Cornell University investigated the property about 1896 and his sampling averaged 3.22% tin per ton of ore. Professor Wm. Black of New Haven published his findings in the Transactions American Institute of Mining Engineers as did Professor Carpenter, President of South Dakota School of Mines who made an exhaustive examination of the district and who also reported finding Columbium-tantalum, one mass weighing 2000 lbs. (Reported AIME Journals, Library of Congress).

P. N. Stankovitch, Assayor of Lead, S.D., May 5, 1905: " The results of the assays I have made on Conner's Ground, on Bear Gulch from a number of samples from the various open cuts, shafts and tunnels, ran all the way from one to sixteen percent in tin, and because of the geological formation I will not be at all surprised if when the property is developed it proves "to be one of the richest tin-mining districts in this country or Europe."

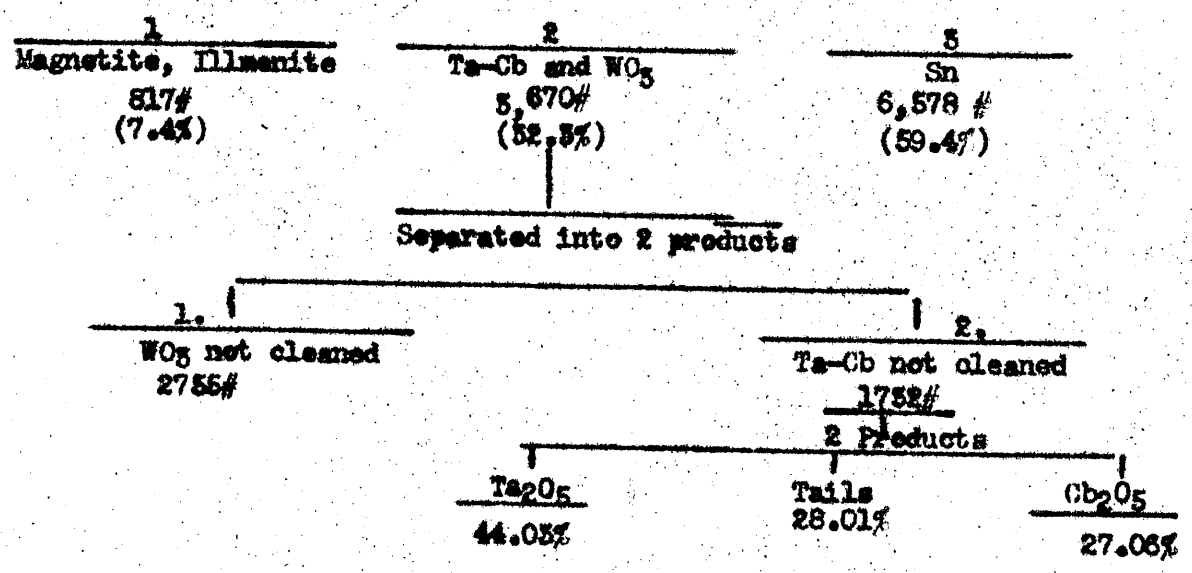
Refer to Taggart's "Handbook of Mineral Dressing" p. 2-221 "Only important domestic production (Columbite-Tantalite) is from Black Hills, S. D.; output of concentrates was 8 tons in 1937, 18 tons 1938, 340 lbs. 1939, 1928, 1929 28.5 tons concentrates, ranging from 38.7 to 57% Cb_2O_5- Ta_2O_5."

Further information:

It is known that of the total above columbite-tantalite concentrates produced by the Fansteel Metallurgical Co., during their operation, 12,000 lbs. of this concentrate was recovered from a small area of what is now part of Keenan Properties gravels.

Separation Flow-Sheet of Columbium-Tantalum Concentrates by Fansteel Metallurgical Corp. 1937.

The first separation gave 3 products, as follows: (from 11,072# Concentrates)



Ex-A.

RATIO OF TIN TO TUNGSTEN

As Certified by Analysis Certificates on Keenan Properties Placer Gravel Concentrates.

Tin - [redacted]
Tungsten - [redacted]
Columbite-tantalite percentages shown in right hand column.

Assays	Percent (5 10 15 20 25 30 35 40 45 50)	Columbite-tantalite %
22		7.2
I3		7.25
8		9.9
I (a)		not analysed
I (b)		4.09
I (c)		12.02
I (d)		not analysed
I (e)		8.25
I (f)		17.35
I (g)		3.28
I (h)		"present"
I (i)		8.6
I (k)		II.5
8 (m)		9.9

Note: Item one shows average percentages of 22 different assays.
Item two shows average percentages of 13 different assays.
Item three shows average percentages of 8 different assays.

The above 43 assays are part of Placer survey report data, as certified by Oscar N. Bribach, Aurora, Colorado.

(a) - Tin Processing Corp. (Longhorn Smelter) 8/II/1948
(b) - F.C. Broeman Co, Cincinatti, #AF-328I-2 (minus ¼inch material)
(c) - F.C. Broeman Co, " " (plus ¼inch ")
(d) - Wah Chang Corp, New York, letter I0/4/1948
(e) - F.C. Broeman Co, Cincinatti, #FIBEM dated I2/I/1948
(f) - Wah Chang Corp, New York, #X-I I/2I/1949
(g) - Ledoux & Co, Inc. New York. #636I5I dated 9/2I/1949
(h) - Walker & Whyte Inc., New York, 9/6/1949
(i) - Oscar N. Bribach, Aurora, Col. December 5, 1949
(k) - Oscar N. Bribach, " December 5, 1949
(m) - Shows the average percentage of 8 different assays on concentrates produced by Pilot Plant Operation, Certified by Oscar N. Bribach.

PILOT PLANT WORK SHEET, 1949 testing.

OSCAR N. BRIBACH.

800 Dayton Street,
Aurora, Colorado,
December 5, 1949.

Samples assayed for Keenan Properties.

Description	Oz. per tn Gold	% Tin	% WO_3	% Earth Acids	Wt. of sample in grams	Milligrams gold	Remarks.
X-1	1.95	50.0	2.0	7.9	334	22.55	Pan Am Jig rougher 10/26/49
X-2	10.15	54.9	3.9	7.7	389	135.11	Denver Jig Product 10/26/49
X-3	0.05	37.2	11.0	10.8	290	0.52	Pan Am Jig Basket 11/1/49
X-4	13.48	54.2	4.0	9.9	327	151.01	Represents 375# from 2650# rougher CON
X-5	4.86	50.7	1.4	7.9	312	52.08	Direct rougher from Pan Am Jig #1hutch
X-6	13.94	4.9	1.6	6.5	1058	506.32	Represents 4350#rougher from 470 cu.yd
X-7	2.81	52.4	3.6	10.2	589	56.93	Denver Jig product (250#not amalgamated
X-8	0.33	44.5	2.0	10.0	269	3.00	Reps.315# from 2350# rougher-84 yards
X-9	4.15	39.2	3.3	9.2	807	115.11	Denver Jig #1 hutchfrom 3500# on 11/12
X-10	0.05	5.1	0.1	0.3	580	0.91	" #2 "
X-11	6.49	10.4	0.3	6.3	807	179.86	Represents 3500# rougher on 11/12
X-12	0.002	0.09	0.01	0.04	2865	2.23	Represents tailings from # X-9,10,11
X-13	0.002	0.07	0.02	0.2	2111	1.05	Represents 25 ton tailing pile in mill
X-14	0.07	0.5	0.01	1.1			Talc sample
X-15	0.05	24.3	1.5	8.6	625	1.06	Coarse, from Pan Am hutch.
X-16	0.76	2.9	nil	2.3	575	14.90	Tailings Denver Jig 8/1 to 10/9
X-18		0.3					Random feldspar sample
X-19	0.12	27.2	7.3	11.5	274	1.11	Plus ¼ minus ½" from Pan Am Jig basket

Note: Pan American Jig - clean shot, adjusted bars and water, Changed Screen on Denver Jig.

Copy

(signed) Oscar N. Bribach

POTATO CREEK

TEST PLANT RECOVERY DATA - 1949

Cubic yards washed.	5,104	c.y.
Rougher concentrate recovered	61,000	lbs.
Cleaner concentrate recovered #1	4,910	lbs.
Cleaner concentrate recovered #2	535	lbs.
Denver Jig tailings in mill #3	50,000	lbs.
Gold amalgamated or recovered	57	ozs.

Recovery	Sn	@ .814 lbs cu.yd.	$ 0.631 @ 74¢ lb.
	Cb - Ta_2O_5	@ .325 " "	0.465
	WO_3	@ .050 " "	0.065
	Au	@ .012 ozs.sht.tn.	0.391
Total recovery value per cu.yd.			$ 1.550

Total Costs (John Green Accountant, Cost of Pilot Plant recovery only). $ 0.680 per cu.yd.

#1 Analysis: 54.2% Sn, 4.2% WO_3, 9.2%Cb-Ta..Fines - 8 mesh

#2 Analysis: 57.2% Sn, 11.0% WO_3, 10.8%Cb-Ta..Coarse,plus 8 m

#3 Analysis: 2.9% Sn, 2.5%Cb-Ta..Rough concentrat

EXPENDITURES MADE BY APPLICANT FROM
SEPTEMBER 1947, TO JANUARY 1, 1951.

1.	Exploration & Development	$ 63,090.95
2.	Process Engineering.....	8,209.10
3.	Prepaid Expenses	6,408.00
4.	Organization Expenses	13,348.00
5.	Miscellaneous Machinery & Equipment	12,138.25
	TOTAL	$ 103,194.30

Leasehold Inventory, Dakota Tin & Gold Co.	$ 289,963.00
Leased Inventory, W. O. Fillmore	7100.50

Sheet 2

Daily Production Costs

Administration	$ 50,00
3 Trommel bosses @ 2.00 hr.	48.00
3 Dragline operators @ 1.75 hr.	42.00
3 Cat operators @ 1.75 hr.	42.00
3 Truck-mechanics @ 1.50 hr.	36.00
4 man contingency crew @ 1.25	40.00
Supplies	75.00
Contingencies	75.00
Fuel	85.00
Overtime	35.15
Trucking to mill	12.00
Payroll, Ins. & Tax	19.68
Eng. Superintendent	25.00
Assayer	15.00
1 Mill Foreman @ $1.75 hr.	15.00
1 Mill hand @ $1.25 hr.	10.00
Mill Supplies	50.00
Mill Contingencies	25.00
Mill payroll, Ins. & Tax	2.64
Trucking to Rail head.	6.95
	$ 709.42

2400 Cu. yds. @ $709.42 = $ 0.295 per cu. yard.

(Previous 1950 estimates show $0.21 per cu. yd., above increase due to increased labor costs, etc.)

EXHIBIT 5 (a-2)

KEENAN PROPERTIES
Deadwood, South Dakota

Breakdown of Equipment, Machinery and Capital Requirements for Placer Program 1951.

Contents

"A" List of Equipment and Machinery available through government warehouses.

"B" List of Equipment and Machinery to be purchased for Placer washing and cleaning plants.

"C" Construction and Assembly Fund Expenditures.

"D" Requirements for Dams, Transportation, Bldgs. Office.

"E" Specialized Services, Equipment, Consultants' fees, separation Equipment. Legal.

"F" Miscellaneous Expenditures.

"G" Recapitulation, total requirements.

A.

Equipment and Machinery available through government warehouses and requested as part of funds guaranteed.

1 - 2 cu.yd. type 802 Lima Dragline, 50' boom with 15' section Page 2 yd. bucket 36" tracks, incl. freight	51,090.00
1 - 1500 Watt Kohler light plant for Dragline	750.00
1 - D-8 Caterpillar, Cab. lights, idler and gearguards, cable control with #80 scraper, straight dozer	31,586.00
1 - D-8 Caterpillar, lights, idler & Gear guards angle dozer, cable control front	17,824.00
1 - 300 KW diesel generator, portable	15,000.00
2 - 10 KW Kohler light plants, portable, gasoline	3,430.00
1 - 300 watt arc welder, gasoline, portable	1,750.00
1 - Athey wagon	3,500.00
2 - Fuel tanks, 500 gal. capacity, portable	800.00
1 - Semi-portable stacker conveyor, 100' centers, 36" belt, with motor	2,800.00
1 - Dump Truck, 5 ton (diesel) end dump	5,000.00
1 - 5" Portable slime pump, gasoline (Pecault)	1,000.00
1 - 3" Portable clear water pump, gasoline motor	510.00
1500'-3" Flexible hose for 3" pump	400.00
2 - 1" Sand Pumps, electric motors, intake hose, ft. valve	700.00
2 - 1" deep well, electric pumps, with pressure tanks	260.00
550'-1" Rubber hose	75.00
3 - Sets spare cable for dragline 802	300.00
Estimated totals	$136,775.00

(Dragline, D-8 Cats, with accessories, are priced as of 1 Jan. 1951

B.

List of Equipment & Machinery to be purchased for Washing and Cleaning Plants.

1 - 8" Sand Pump, diesel powered, hydroseal type with 25' intake hose and foot valve	5,000.00
2000'-8" Lockstream, Spiral Weld, Naylor Pipe	3,000.00
1 - Trommel screen, 72" diameter, 5' scrubber 16' at 1/2" perforations 9' at 3/4" 4' discharge (S-A-10)	6,000.00
2 Sets Athey tracks, 15 ton wheels, 10' 7" base	7,500.00
1 - Titan Amalgamator, continuous flow & motor	1,800.00
1 - Dodge Power wagon, front winch, rear p.t. off	2,780.00
1500'-5" Lockstream, Spiral weld, Naylor pipe	1,800.00
1 - 15 h.p. d.c. motor for 4" sand pump	325.00
Misc. Elec. Motors 220/440 v. 2 ph. 5. cycle	3,000.00
1 - Spiral Screw dehydrator, dewatering	2,700.00
1 - Trommel distributor	750.00
1 - Trommel hopper w/grizzly	2,000.00
1 - Wilfley, concentrating table, Lab. size (7')	725.00
500'- Black Iron pipe 2" dia. sleeves, elbows, T's.	145.00
1000'- Black iron pipe 3/4"-1-1/2" dia. elbows, T's	252.00
1 - Cement Mixer, 1 cu. yd. capacity, gasoline drive	225.00
150 - Sacks Cement	165.00
Misc. Lumber, tar paper, putty, glass, nails	1,000.00
1 - Flask mercury	96.00
3 - Ore feeders with electric AC motors	1,000.00
Misc. Testing equipment, mill and laboratory	1,387.00
1 - Rotary Kiln Drier (Custer)	350.00
1 - Dings Magnetic Separator	1,000.00
	$43,000.00

C.

Construction and Assembly Fund. Labor, Parts, Washing and Cleaning Plant Erection and Installation.

Misc. Administration, Executive expenses	$ 11,200.00
Engineer Superintendent	2,500.00
Carpenters	3,136.00
Welder Mechanics	2,352.00
Machinists	2,352.00
Helpers	4,032.00
Bookkeeper, stenographer	1,120.00
Advance Compensation Insurance	1,500.00
Overtime & Contingency Labor	3,000.00
Insurance on Mill & Placer Equipment	500.00
Royalties, monthly advance	1,000.00
Parts & Materials	5,500.00
Contingency materials, parts, dams	25,182.00
Travel Expenses	3,800.00
Fuel, diesel and gasoline	1,200.00
	$ 68,374.00

D.

Dams, Transportation, Buildings, Office

1 - dam Potato Creek	22,500.00
2 - dams Bear Creek	26,000.00
1 - Automobile executive	2,200.00
2 - Chemical toilets, septic tanks	400.00
Misc. Repair Blacksmith Shop	500.00
" Sewage disposal Mill Camp	50.00
" Repair 2nd Floor Commissary bldg.	150.00
" Wiring & lighting fixtures, mill	1,000.00
" Fire extinguishers, quarters	450.00
" Reconditioning personnel quarters	600.00
1 - Typewriter	175.00
Misc. Stationery & Supplies	75.00
" File cabinets	100.00
" Office, commissary equipment	800.00
	$ 55,000.00

E.

Specialized Services, Equipment, etc.

The Dorr Company, Stamford, Connecticut Pan American, Placer Jigs, roughers and cleaners, Type FP Classifier, Installation and initial operation, Engineering fees as outlined in contract proposal	16,100.00
Mr. Oscar N. Bribach, Chemist, Aurora, Colorado, Separation equipment, Machinery and Supplies	20,000.00
Services, 1 month	1,600.00
Mr. Walter Johnson, Consultant	2,500.00
Legal fees, contracts, etc.	2,500.00
	$42,700.00

Miscellaneous

Black Hills Power & Light Co. Highline	3,250.00
Accounts, Notes payable	36,500.00
Freight	10,000.00
Operating Fund, 180 days	125,000.00
	$174,750.00

Recapitulation

Sheet	A.	Government supplied equipment	$ 136,775.00
	B.	Washing and Cleaning Plants	43,000.00
	C.	Construction & Assembly Fund	68,374.00
	D.	Dams, Transportation, Buildings	55,250.00
	E.	Spec. Services, Separation Equipment	42,700.00
	F.	Power & Light, Freight, Accounts, Operating Fund & Contingency Fund	224,500.00
		TOTAL	$ 570.599.00

EXHIBIT 8 B

Cost & Profit data. Placer Operations Flow-sheet

Sheet

On basis of 3,000 cu. yd. capacity* per 24 hours (2400 cu.yds. 80% efficiency) Producing 3.2 lbs. concentrate per cu. yd. gravel, @31.87% Sn, 10% Cb-Ta, 10% WO_3. 35¢ Au per cubic yard, and recovering 80% of contained values. (Average operation 180 days per annum).

1.	7,680 lbs. concentrate @ $0.890 per lb.		$6,835.20
2.	Production Costs (See sheet 2)	$709.42	
3.	Separation Costs @ $0.40 per lb.	1,258.00	
	Amortization ($350,000.00 over 3 yrs.)	648.15	
	Royalties @ 12.5%	727.27	
4.	Depreciation & Reserve Fund	158.74	
	Contingencies 2%	116.38	
	Exploration & Development 3%	174.57	
5.	Overhead service to contracts & Sales	652.07	
	Total		$4,444.60
	Net Profit per 24 hours		$2,390.60
	Net per 30 days		$71,718.00
	Net per 180 days		$430,308.00

*Based on Lima-Hamilton Corp. data for #802 dragline equipment
1. Based on Sn, @ $1.50 lb., Cb-Ta @ $1.00, WO_3 @ $63.00 unit
2. Increase over previously estimated 21¢ cost due to increased cost of labor
3. 40¢ per lb. contained oxides
5. $[illegible] [illegible] licensefees, legal.

YARDAGE & VALUES DATA - BEAR & POTATO CREEKS

Bear Creek

Yardage:	670,000 cubic yards @	0.815 lbs. Sn per cu. yd.
		0.256 " Cb-Ta "
		0.256 " WO_3 "
		0.010 ozs. Au
Values:	0.815 lbs. Sn @ $1.50 lb.	$1.222 per cu. yd.
	0.256 " Cb-Ta @ $1.00 lb.	.256 " "
	0.256 " WO_3 @ $63.00 unit	.806 " "
	0.010 ozs. Au @ $35.00 oz.	.350 per cu. yd.
Gross Total Value		2.634

Potato Creek

Yardage	400,000 cu. yds. @	0.637 lbs. Sn per cu. yd.
		0.216 " Cb-Ta "
		0.216 " WO_3 "
		0.010 ozs. Au
Values:	0.637 lbs. Sn @ $1.50 lb.	$0.955 per cu. yd.
	0.216 " Cb-Ta @ $1.00 lb.	.216 " "
	0.216 " WO_3 $63.00 unit	.680 " "
	0.010 ozs. Au @ $35.00 oz.	.350 " "
Gross Total Value		2.201 per cu. yd.

Bear Creek based on 3.2 lbs. concentrates produced per cu. yd., containing 31.87% Sn 10% Cb-Ta, 10% WO_3, recovering 35¢ Au per cu. yd., and 80% of contained values in Tin, Columbium-Tantalum and Tungsten.

Potato Creek based on 2.7 lbs. concentrates produced per cu. yd., containing 29.5% Sn, 10% Cb-Ta, 10% WO_3, recovering 35¢ Au per cu. yd., and 80% of contained values in Tin, Columbium-Tantalum and Tungsten.

In addition, about 200,000 ton of placer gravels on Beaver Creek of approximately the same or higher values than Potato Creek are now to be included in the Keenan placer properties, which were not previously included in yardage estimates. The loan application will include these additional gravel deposits.

EXHIBIT 5-(a-1)

INVENTORY

KEENAN PROPERTIES
SPEARFISH, SOUTH DAKOTA

AS OF JUNE 1, 1949

All items at Mine Site, Tinton, Lawrence County, South Dakota.

TRANSPORTATION:	1 Dodge Power Truck, 4 x 4, four wheel drive, New Engine, 1948	$ 880.00
MOTORS, ENGINES, GENERATORS:	1 Mc Deering, K-7 Power Unit, 1948 with 4 V sheave and belts	670.49
	1 Counter shaft and V belt drive	122.00
	1 AB Wisconsin Air cooled 3 hp gas engine, V pulley and belt	112.00
	1 motor mount bracket for above	25.00
	1 ½ hp gasoline Y tag engine	25.00
	1 Red Jacket Force Pump and Jack with 2½ Int. Harvester gas engine '48	214.48
	1 Continental 1939, 30 hp. gasoline power unit, flat pulley and belt.	250.00
	1 International 28 hp 1949 gas unit	192.50
	1 Briggs & Stratton 6 hp. gas engine 1948 model. V belt pulley, bracket mount and cut-off saw.	260.00
	1 LeRoi Compressor, 105 Cu.Ft. 1942	1,500.00
	1 Briggs & Stratton 3 hp. gas engine	85.00
MACHINERY, PLACER PILOT PLANT:	1 complete portable land washing plant: 36" x 12', 6' screens with 6' x 5' hopper, trunnions, gears and carriers, mounted on Linn ½ track caterpillars. Powered base unit with pipe lines, tailing sluices grizzly (hydraulic now being installed.)	
	2 cell Pan American Balanced rougher Jig with motor, 42 x 42, 1948 model. 4" sand pump, full V belt drive. Fire equipment and insurance	20,000.00
	1 Hodge Centrifugal Sand pump, 6" with intake hose, foot valve, 15 feet seamless rubber hose.	684.00
	50 feet 2" hose	37.50
	800# steel shot ¼"	112.00
	400' 6" Orangeburg Pipe & couplings	311.37
	50' 6" five ply hose	187.50
	Gate valves, misc. belting	50.00
		25,718.84

$ 25,718.84

MACHINERY, MINING & MILLING:	1 Denver duplex mineral jig 12 x 18 complete	$ 1,200.00
	misc. spouting and launders	200.00
	23 Grizzly rails	100.00
	25 feet 2" hose	35.00
	15 feet corrugated pressure hose	23.00
	1 steel hopper with grizzly	250.00
	750 feet 16" rails, switches, etc.	200.00
	misc. pipe 1½" 2" 2½" 2½" 3"	325.00
	drill bits, boxes	125.00
	6 steel wedges	2.50
	2 tubs, galvanized	2.50
	1 H.S. hat	5.00
	1 B.S. hammer	2.95
	1 8# hammer striking	2.45
	8 picks	20.00
	10 shovels	22.25
	1 LdR F shovel	2.30
	1 400 x 8 wheelbarrow tube wheel	12.52
	1 wheelbarrow	10.00
	1 miners pick	1.60
	1 respirator	2.45
	2 hex hollow steels	17.00
	100 feet 3/4 galv. pipe	19.26
	18 feet square steels	17.00
	powder caps	2.10
	6 double steel blocks	6.50
	1 line oiler	14.50
	1 compressor stop ½"	1.35
	1 Black iron barrel	88.00
	misc. V beltings	22.20
	5 B 37 Volco ropes	15.30
	50 pounds 45% gelex	11.50
	1 sq. pt shovel	2.50
	1,500 feet misc. lumber, lagging	85.00
	9 hose couplings	11.55
	1 sledge hammer 15#	4.25
	misc. switches, frogs, track spikes	5.00
	2 1" Oct. quarter drill steels 3'	15.50
	2 1" Oct. " " " 8'	19.00
TOOLS MISCELLANEOUS:	1 Chain hoist	110.00
	25' Goodrich belting 4"	13.47
	23' " " 6"	25.30
	2 funnels	.85
	2 hammers	3.84
	keg 16 p nails	13.81
	keg 20 p nails	11.05
	keg 30 p nails	11.05
	1 wrench pipe	3.25
	belt lacing	3.50
	belt dressing	.95
	misc. zerks	1.00
	1 magneto	53.00
	1 block and tackle	15.00
		28,869.94

$ 28,886.94

TOOLS
MISCELLANEOUS
Continued:

1	25 ton hydraulic jack	$ 45.00
2	8' mine jacks	50.00
	blacksmith shop tools, misc.	700.00
1	carpenters plane	5.30
1	saw set	2.96
1	wrench crescent	2.98
	file holder and punch	2.43
	Whittaker cables	5.25
1	set taps and dies, Stanley	34.04
10	feet V belting (4V)	4.15
	box saw teeth	4.72
1	30 gallon drum	3.00
2	tire and rim units	7.96
2	acetylene tanks	12.90
1	oxygen tank	6.79
1	Mawl Power Saw	455.00
1	sprocket and chain	10.00
1	pliers	1.35
1	thread key pulley	1.97
1	NO cutter wheel	1.70
1	storage battery	21.50
2	storage batteries	39.85
1	set welding gauges and hose	158.88
1	ground clamp arc welder	3.50
1	electrode holder	5.50
2	hand saws, cross cut	7.20
1	key hole saw	.69
1	hack saw and blades	5.95
1	vice	3.59
2	saw handles	.98
1	claw hammer	1.90
3	auger bits	3.10
1	simmons saw-set #342	3.25
2	file handles	.65
	misc. files	3.00
1	rake	1.50
1	double bit axe 3#	3.49
4	axes 3½#	14.00
1	glass cutter	.75
1	oilers	1.19
1	drafting board	35.00
1	set Hone scales and pan	65.00
2	hot shot batteries	4.80
3	padlocks	4.52
1	saw crimper	1.75
1	steel tape	1.36
1	miners lamp, carbide	1.79
	track bolts	2.04

$30,841.15

30,641.15

MISCELLANEOUS EQUIPMENT:	1	flask mercury	69.00
		misc. electric insulators, meters, switches, converters	300.00
		misc. electric wire and cables	150.00
	1	air pressure tank	30.00
	1	assay furnace #461	350.00
		assay furnace equipment	40.00
		misc. acids, litharge, etc.	75.00
	1	set laboratory scales	45.00
	1	set screens 20-200 mesh	85.00
	3	5 gallon cans, gasoline	4.35
	2	bend snaps straps 60 x 60	1.73
		misc. nuts and bolts	2.95
		misc. nuts and bolts	18.00
		pipe fittings, elbows, nipples universals, reducers, etc.	130.00
		25# miners carbide	2.50
	84	sacks cement	103.25
	18	sample bags	9.20
		assorted welding rods	10.85
	1	pr 6" nipples	29.00
	1	spline shaft and knuckle	38.00
		caustic soda 10#	2.07
	3	lamps, Coleman	19.95
OFFICE EQUIPMENT:	1	typewriter, Remington	83.00
		file cabinet	21.00
		stationery and envelopes	15.00
		misc. office equipment	10.00
COMMISSARY AND QUARTERS:		misc. commissary utensils	23.14
	2	garbage cans	9.59
	2	dish pans	2.16
	2	pails	2.98
	2	wash basins	1.30
		cooking utensils	27.00
	1	bed, spring and mattress	22.50
	1	mattress, double bed	28.00
	14	lengths stove pipe	5.60
		flash lamps	3.15
	2	brooms	2.00
		misc. cleaning utensils	3.85
	2	roof saddles	9.18
	50	feet screen wire doors	8.67
	1	iron bed and spring	14.00
		½" rope	5.60
	2	rolls slate roofing	5.00
	1	rollaway and mattress	15.00
	2	enamel buckets	4.80
	4	wool blankets	16.12
	4	feet canvas, 8 oz.	1.23
	4	rolls roofing paper	15.00
	4	rolls " "	17.00
			$ 32,532.87

MISCELLANEOUS INVENTORY ADDITIONS FROM

June 1, 1949 to Dec. 1, 1949

1 welding hood, arc type	11.55
1 galvanized pail	.70
1 steel tape	1.75
1 arc welder, Western Electric, V-8	500.00
1 drill press, hand	13.82
1 grease pump, complete, portable	39.45
1 trommel extension 3' 8"	120.91
1 storage battery	19.50
1 storage battery	10.58
3 clip boards	1.51
320' Orangeburg pipe	232.58
misc. assay furnace fittings	4.37
1 grease gun	2.84
1 V sheave pulley	5.99
misc. acids, etc., assay equipment	17.84
tire and tube	19.54
1 fire extinguisher	5.10
1 storage battery	14.90
1 concentrating table	25.00
1 storage battery	13.60
1 mineral light	30.10
1 storage battery	15.32
7 gallons freezone	19.65
2 gold pans	5.75
2 tires and tubes	43.84
2 ultra V ray glasses	20.26
1 hack saw	1.49
115' dragline cable	26.60
1 storage battery	12.22
1 tarpaulin, Express pickup	6.58
50' wire screen 1/4" mesh	15.46
misc. belt fasteners	3.09
1 radiator hose and clamp	1.03
1 filter bowl and gasket	.60
1 V belt	1.60
1 shovel and handle	2.96
2 long shovels	5.25
2 pans	3.97
3 brooms and rake	7.15
1 air gun fitting	1.00
4 15 gallon drums	6.00
20# mercury	30.40
3 V belts, B-37	8.13
1 threaded stud.	1.00
misc. commissary dishes	1.53
1 air cleaner	1.50
1 starter switch	1.29
misc. window glass	1.22
misc. nails, 10 penny	10.42
1 V belt, B-37	3.04
misc. welding rod	14.75
1 Denver amalgamating barrel	175.00
	$1,583.13

INVENTORY ON LEASE TO KENNAN PROPERTIES

DAKOTA TIN & GOLD DEVELOPMENT, BUILDINGS AND EQUIPMENT

Shaft house	$ 25,000.00
Shaft 135', 8'x18' clear, 5 compartments 4½'x4½' each @ $100 ft.	135,000.00
1 Denver gold mill	1,000.00
Hoist	15,000.00
Cable 1 1/4"	1,000.00
Stoker	700.00
Hoist and cable	6,000.00
2 generators, 1 AC, 1 DC	1,500.00
4 steam boilers--water and air storage	2,000.00
2 air compressors (convertible)	1,000.00
Linn half track	30,000.00
1000' pipe, 1½", 2", etc.	200.00
Scrap iron	300.00
Cement mixer	75.00
600' 16# rails and ore car	200.00
75 cords wood	750.00
5 frame cabins	5,500.00
Black-smith shop	700.00
Assay house and furnace, scales equipment	1,000.00
Small tools, steels, squares, scales wheel barrows	750.00
Bits	235.00
Dam in creek	3,000.00
Tunnel 130' level leads under N. tunnel to tin ledge at 130' level	4,500.00
Timbers for mining operations	33,000.00
Saw Mill building	1,200.00
Saw Mill equipment	7,500.00
1 switch panel 4 HP Cushman motor	513.00
1 concentrating table	925.00
1 liner, shell post	725.00
1 pulverizer type crusher No. 57	225.00
1 set scales	450.00
1 assay furnace and stand	150.00
1 set How scales and pan	65.00
2 Sutton steele double deck vibrating screens, 2 electric motors	1,900.00
2 elevators and electric motors	1,800.00
1 Jaw Crusher	2,000.00
2 ore cars	400.00
1 stoker	700.00
TOTAL	$ 289,963.00

EQUIPMENT LOANED TO KEENAN PROPERTIES

Equipment Loaned by W. O. Fillmore

1 Briggs and Stratton 1 HP gas engine	$ 85.00
1 rake classifier	350.00
1 3'x3' ball mill	550.00
1 4HP Cushman motor	60.00
1 mall power saw	450.00
1 air hoist and tank	1200.00
1 master switch	50.00
1 drafting board	50.00
½ keg finishing nails	6.00
50' 2" hose	57.50
1 portable tool carrier	5.00
1 ¾ cylinder 2½" pump and engine	600.00
1 A boom and box	450.00
1 flask mercury	85.00
1 assay furnace No. 461 muffles, fire tongs, lids, oil tank	350.00
miscellaneous acids, letharge, etc.	75.00
1 set laboratory scales	25.00
1 set screens 65, 100, 2-150, 200 mesh	75.00
400 gallon water tank	150.00
1 chain hoist	250.00
2 V belt pulley	97.00
1 Durant gas power unit	180.00
10 electric motors, 1½ HP to 10 HP	1500.00
1 ¾ cylinder 3" force pump	450.00
TOTAL	$ 7100.50

KEENAN PROPERTIES
Spearfish, South Dakota

1 January 1951.

ASSETS

Cash on hand	$ 2,200.00		
Recovered values on hand	2,166.00		
Concentrates in process	2,250.00		
Accounts receivable	317.00		
Total current		$ 6,933.00	
Other stock in process (tungsten)		28,000.00	
Mine & Mill supplies on hand		211.20	
Keenan Properties Inventory		32,716.00	
Prepaid Expenses		2,583.00	
Advance royalties to 1/1/51		3,575.00	
Organization Expenses		1,863.06	
Expended Exploration & Development 9/11/47 to 3/12/48		50,534.00	
Expended Exploration & Development 1/1/49 to 12/27/49		12,556.95	
Process Engineering 12/27/49 to 9/15/50		8,209.10	
Total			$ 147.181.31
Leasehold:			
Bear Creek Placers		$ 2,508,130.00	
Potato Creek "		1,421,316.00	
Feldspar-tin ore Reserves		2,897,785.00	
Tin ore Potential reserve		6,660,000.00	
Total Leasehold			$13,487,231.00
Total Assets			$13,634,412.31

LIABILITIES

Accounts payable	$ 5,162.60		
Total current		$ 5,162.60	
Loss on Inventory		901.22	
Note payable		15,776.36	
Interest above note		440.00	
Loans payable		8,004.00	
Total			$ 30,284.18
Net Worth			$13,604,128.13

NOTE: Above expenditures do not include administrative salaries of executives for 35 months.

KEENAN PROPERTIES,
Spearfish, South Dakota.

Technical Data for attachment to NSRB - 146.

1. EXPERIENCE:

The applicant's mining and business experience began in her childhood, when her father explored and developed copper and galena properties on the middle Tule River in the high Sierra Nevada range in California.

In 1932 the applicant signed a contract with the Columbia Broadcasting System and appeared on commercially sponsored programs as a musical artiste and announcer. A contract with the National Broadcasting Company followed, and another with the Mutual Network System. In 1937 the applicant explored the reported pitchblende strike on the Bishop property on the Mojave Desert and the quartz-gold properties northwest of Lone Pine, California (a property similar in structure to the Golden Queen in the Mojave.)

The applicant was co-inventor of a plastic tile, manufactured by the Corite Corporation in Los Angeles. The applicant was responsible for manufacture and sales promotional work for the tile, assembly of test machinery and equipment, supplies (chemical) installing the demonstration floors, financing the manufacturing plant and supervising the office personnel. Through the efforts of the applicant the tile was approved and specified by the Federal Housing Authority and the Veteran's Administration Chief Architect, Washington, D.C. under the name Resilite.

In 1947 the applicant began exploration and checks of the Dakota Tin & Gold property in the Black Hills of South Dakota. The property was explored at the applicant's expense by a geologist and a tentative lease entered into. In 1948, considerable research on the marketing of feldspar was carried out by John F.Stanwell-Fletcher. In March 1948 exploratory work was begun and the tin-bearing pegmatite dikes re-opened. Various stream gravels were explored and checked, assays were made on stream g gravel concentrates from these streams and adjoining properties were leased. Machinery was installedand road building, water reservoirs, building improvements on the property were carried out preparatory to a commercial mining and milling operation. Management: The mining activities will be managed by a planning board, which will direct a competent placer mining engineer who will carry out the use of specially designed placer equipment, processes and mill circuit. The Planning Board will be comprised of the applicant; John F.Stanwell-Fletcher, who has had considerable experience in engineering research, design, development and product ion of mechanical equipment fot the U.S.Air Force; Mr.E.J.Duffy, Duffy Construction Corporation, New York City, nationally known construction engineers and earth movers; Mr.Walter W. Johnson of SanFrancisco, California, Whose firm has been design- ng, engineering and operating placer equipment for the past 45 y ars, all over the world. Mr.Johnson's firm has built 58 gold acer dredges (one in Portugal, two in Bolivia) They are now cessfully operating 1 gold dredge in Alaska and 1 gold dredge California. Keenan Properties is fortunate in haveing the

by two storage dams, on Potato Creek, by a natural flow of approximately 1000 gpm until dry season, during which reserves of water are released from a series of additional dams, on Potato Creek, ½ mile above the mill property.
Legal Counsel has certified that all water rights are secure.

8. PRODUCTION:

For proposed Expanded Production see Exhibit 8.

9. MARKETING:

Concentrates produced by placer operation in the streams will be trucked from the washing plants to the mill for drying, chemical separation process, packaging and delivery by truck to n nearest railroad depot as per contract requirements. Market for all minerals is already established by expressed desire on the part of the Military Establishments, and General Services Administration, to have Keenan Properties in production, regardless of the tonnage or poundage, at the earliest moment. No smelting or custom milling.

10. COSTS:

(a) See Exhibit 8.
(b) "
(c) No smelting costs.
(d) See Exhibit 10 (d)

11. MILLING:

(a) Mill building on the property, designed for milling of
(b) feldspar, is new and has not been used. Ample space is
(c) available for drying and chemical separation process. Building is designed to treat 50-75 tons per day.
Product will not be sold to custom mill and additional building is not contemplated by applicant.

12. SMELTING:

Not applicable to this operation.

13. POWER:

(a) Movable Placer Plant operated by Diesel and electric motors using approximately 150 h.p. Power supplied by portable diesel generator. Mill requirements; approximately 250 h.p. maximum; shops 50 h.p.
(b) 1800 feet.
(c) $3,000.00 for extendind high line, $250.00 for converter as estimated by the Black Hills Power & Light Co.
(d) .01½ to .02¢ per kw.
(e) Portable electric light units as temporary facility until high line extension completed. Cost approx $1,200.

14. LABOR:

(a) Experienced miners, millmen, carpenters, welders and laborers are available in immediate vicinity.
(b) Minimum of 31 personnel additional.
(c) Current wage scales $0.85 to $2.15 for artesans.
(d) Adequate housing facilities on property for 15 workmen, in frame buildings, Commissary, Utilities. Additional quarters and recreation building with showers etc. are planned for 20 men and staff.

4

14: LABOR continued.

(d) In addition to present housing facilities, and those planned for erection, housing facilities, light and water and utilities are available within half a mile from the property. The owners being anxious to have the buildings occupied.

15: The Production of neighboring properties are referred to in the Department of the Interior, Bureau of Mines Reports of Investigations, Information Circulars, and Geological Survey Bulletin listed in Item 5 (e) above. Also see Bureau of Mines Mineral Year Book, 1948, paragraph 2,page3.

February.....1951. MEENAN PROPERTIES

KEENAN PROPERTIES
Spearfish , South Dakota
April 16, 1951

Under date of February 16, 1951, we sent Mr. Malcolm H. Carpenter, Research and Development Division Emergency Procurement Service, a letter of transmittal with three proposals for contracts addressed to Captain H. C. Maull, Jr., Chief Emergency Procurement Service, General Services Administration. The contract proposals offered the highly strategic metals - Columbium-Tantalum, tin, tungsten, and request was made that General Services Administration transmit our proposals to you with a request for certification of our placer project by Defense Minerals Administration according to the authority granted in the guarantead loan-contract clause of the Defense Production Act of 1950, Sec. 302.

The attached technical data was obtained by certified records of pilot plant operation and a complete placer survey by a competent engineer, who had previously studied our stream gravel deposits and geology for a number of years. In support of Keenan Properties data, may we bring to the attention of your office the following Dept. of Interior documents which reveal the presence of the same metals in the pegmatite dikes as these reported in our streams flowing through these dikes.

Report of Investigations	3404
" " "	3336
" " "	4484
Information Circular	7069
" "	7054
" "	7084
" "	7319
" "	7550
Geological Survey Bull.	922-T

KEENAN PROPERTIES
Spearfish, South Dakota

DEPOSITION

Referring to the lease titles of certain Placer Stream Gravel not otherwise mentioned in leases submitted by Keenan Properties, we herewith state that where the lower Potato Creek Placer Gravels of the Belmont lode claims end, Placer Survey M.S. 392 begins and extends to the confluence of Potato Creek with Beaver Creek (Sections 1, 2, 3, 4, of Assays "P"). Placer Survey M.S. 392 extends in a southerly direction on Beaver Creek to join the W. O. Fillmore lode claims covering the Upper Beaver Placer deposit. These are referred to in Sections 21, 22, 23, 24, 25, 26, 27, 28, of Assay "P" of the Bribach report of the Driskill Survey. The Upper Beaver yardage was not previously included in the total yardage of Keenan Properties of 1,000,000 yds. plus, but now the additional 200,000 cu. yds. (approx.) are included in the Placer Gravels on which Keenan Properties are now making application for a loan.

The Placer Survey M.S. 392 was leased by Keenan Properties from W. O. Fillmore, November 1, 1949. The W. O. Fillmore lode claim property on Upper Beaver is part of the W. O. Fillmore lease dated August 8, 1948.

I certify that the above is a true statement.

Peggy Keenan
Peggy Keenan
d/b/a/ Keenan Properties

Subscribed and sworn to before me this _____day of April, 1951.

_____
Notary Public, S.D.

PLACER SURVEY MS-592

Rawlins Mining District

Township 5N., Range 1E, Lawrence County, South Dakota.

Including that part of Potato Creek from the confluence of Beaver and Potato Creeks, in Section 21, extending 2,400 feet westerly to the unpatented Belmont Claim Number 4, Section 20, and including that part of Beaver Creek from the confluence of Beaver Creek and Potato Creek, Section 21, and extending in a southerly direction for 1,400 feet approximately, to the northern boundary of the Harkness Claim, Section 21. All situated between the 95th and 96th mile posts, and containing approximately 45 acres.

Peggy Keenan
d/b/a Keenan Properties

C O P Y

C O P Y

MINING LEASE

This INDENTURE, Made this 1st day of November in the year of our Lord one thousand nine hundred and forty nine by and between W.O. Fillmore, Spearfish, South Dakota, party of the first part, and Peggy Keenan, Spearfish, South Dakota, party of the second part,

WITNESSETH: Whereas, the party of the first part is the owner of certain mining property situated in Lawrence County, South Dakota, on Beaver Creek known as placer survey M.S.592,

AND WHEREAS, the Lessee is desirous of prospecting the said real estate for minerals and developing said placer claim and extracting ores and minerals therefrom:

NOW THEREFORE, in consideration of the mutual considerations herein contained and other good and valuable considerations, the parties to this agreement hereby agree as follows: to-wit:

1. Lessor hereby grants to Lessee, her heirs and assigns, the exclusive right to go upon the above described premises at any and all times by herself or through her agents, employees and assigns with the necessary tools, vehicles and equipment, mining or otherwise, for the purpose of developing, prospecting, and of mining any and all minerals and ores.

2. Lessee is to have the free and uninterrupted use of all roads built and in use upon said premises during the period of this Lease Agreement and Lessee shall have the right and privilege hereby to erect such other and additional roads, sluiceways, pipe-lines, buildings, telephone or cable and to do all other things as may be deemed necessary to the proper carrying out of mining operations upon the premises above described.

3. THE LESSEE hereby agrees to pay to the Lessor a royalty of twelve and one half percent (12½%) of the gross value of any ores or minerals mined processed or sold from said property.

4. LESSEE has the rights and privileges of cutting all such timber as may be necessary for the proper carrying out of the mining operations on the said Beaver Creek Property.

5. LESSEE hereby agrees to and does assume responsibility and liability for all damages and injuries to persons and Property which may be the direct result of the mining operations carried out under the terms of this Lease Agreement. It being understood that Lessor may erect and post such notices of non-responsibility and non-liabilities in connection with the mining operations as carried on under the terms of this Lease as may be necessary to protect the said Lessor.

6. LESSEE herein shall have the privilege of bringing upon the premises above described any and all mining equipment and materials as may be necessary for the successful carrying out of mining operations under the terms of this Lease. It being understood and agreed by the parties hereto that any such material and equipment that is brought upon the premises as aforesaid, shall remain the exclusive property of the Lessee, and that Lessee shall at all times have the right and privilege to remove the same either during or upon the termination of this Lease, whether the same be regarded by the Law of this State as fixtures or not.

7. THE LESSEE is to have the right of immediate possession to the premises and property herein the subject of this Lease upon the execution of this agreement.

8. LESSEE agrees to render the Lessor quarterly a true and exact statement of the amount and type of ores mined and sold from properties described under this Agreement.

9. The payment of Royalty under the terms of this agreement shall be monthly.

10. All payments are to be made under the tgrms of this Agreement by depositing the amounts due to the account of Lessor in the First National Bank of the Black Hills, Spearfish Office, Spearfish, South Dakota or to Lessor in person.

11. Time is of the essence of this agreement. This Agreement shall be binding upon both parties hereto, their heirs, assigns, and legal representatives.

The parties hereto hereby state that true and correct copy of the above and foregoing Agreement was delivered to them at the time of execution of this Agreement and further that they acknowledge receipt of the same.

IN WITNESS WHEREOF WE have hereunto set our hands and seals on this the date first written above.

_____	s/W.O. Fillmore Lessor
_____	S/Peggy Keenan Lessee

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MINING LEASE

This INDENTURE, Made this 7th day of August in the year of our Lord one thousand nine hundred and forth eight by and between W.O.Fillmore,Spearfish, South Dakota party of the first part, and Peggy Keenan, Spearfish, So.Dak. party of the second part,

Witnesseth; Wheras, the party of the first part is the owner and/or controls ~~of~~ certain mining property situated in Lawrence County, South Dakota and Crook County, Wyoming and known as the Parrot Lode, the Parrot Lodes numbers one to seven inclusive, consisting of approximately 160 acres; the Rob Roy Lode claims numbers one, two and three, the Rob Roy Fraction, mining survey 1877, consisting of approximately 60 acres; the Mayflower, the Mayflower claims no's one to seven inclusive, survey 1879, and the Mayflower Addition, consisting of approximately 170 acres, the Bear Gulch mining property consisting of the White Chief, the Eureka, and the Provenier no.two, approximately 57.30 acres all in Lawrence County,South Dakota and the Madeline Lode mining claim, the Madeline claims numbers one to seven inclusive, consisting of approximately 160 acres, said Madeline Lodes located in Crook County, Wyoming.

AND WHEREAS, the Lessee is desirous of prospecting the said real estate for minerals and developing said mining claims and extracting ores and minerals therefrom:

NOW THEREFORE, in consideration of the mutual considerations herein contained and other good and valuable considerations, the parties to this agreement hereby agree as follows, to-wit:

-1-

Lessor hereby grants to Lessee, her heirs and assigns, the exclusive right to go upon the above described premises at any and all times, by herself or through her agents, employees and assigns with the necessary tools, vehicles and equipment, mining or otherwise, for the purpose of developing, prospecting, and of mining any and all minerals and ores.

C O P Y

C O P Y

Lessee is to have the free and uninterrupted use of all roads built and in use upon said premises during the period of this Lease Agreement and Lessee shall have the right and privilege hereby to erect such other and additional roads, sluice ways, pipelines, buildings, telephone or cable and to do all other things as may be deemed necessary to the proper carrying out of mining operations upon the premises above described.

-3-

Lessee hereby agrees to mine Feldspar and other minerals, including placer where it exists,upon said mining property owned and controlled by Lessor, and may erect such plants and buildings as necessary for the sampling and treatment of all ores and minerals whether mined on the premises or not.

-4-

Lessee is hereby given the right and privilege of cutting and using all such timber upon said premises as may be necessary for the proper carrying out of the mining and milling operations above described.

It is further agreed by the ~~Lessee~~ Lessee that Lessor may remove any timber from the patent mining claims where it does not interfere in the mining operations of Lessee.

-5-

Lessee hereby agrees to and does assume responsibility and liability for all damages and injuries to persons and property which may be the direct result of the mining operations carried out under the terms of this Lease Agreement. It being understood that Lessor may erect and post such notices of non-responsibility and non-liabilities in connection with the mining operations as carried on under the terms of this Lease, as may be necessary to protect the said Lessor.

-6-

Lessee herein shall have the privilege of bringing upon the premises above described any and all mining equipment and materials as may be necessary for the successful carrying out of mining operations under the terms of this Lease.

C O P Y

C O P Y

It being understood and agreed by the parties hereto that any such material and equipment that is brought upon the premises as aforesaid, shall remain the exclusive property of the Lessee, and that Lessee shall at all times have the right and privilege to remove the same either during or upon the termination of this Lease, whether the same be regarded by the Law of this State as fixtures or not.

It being also understood that upon the termination of this Lease and in the event that the Lessee should see fit to sell such equipment, that the Lessee will first offer the same to the Lessor at a price to be determined by the Lessee and no other person.

-7-

The Lessee, in consideration of the privileges and rights above granted hereby agrees to pay to the Lessor a royalty of ONE DOLLAR for each ton of any Feldspar ores mined, processed and sold from the herein described properties, and to further pay royalty on all other ores and minerals mined, processed and sold from said properties at the rate of Ten (10) percent of the gross value on such ores having a gross value up to Ten ($10.00) Dollars per ore ton, and a royalty of 12½% of the gross value on all ores having a gross value of over Ten ($10.00) Dollars per ore ton.

-8-

In the event that the Lessee shall deem it advisable to process or mill upon said premises of this Lease other ores or minerals not mined or found upon the said premises, the Lessee will pay to the Lessor the sum of Ten Cents (10¢) for each ton of Feldspar ores found outside the premises, processed and sold therefrom, and 1 % of the gross value of all other minerals that may be found outside and brought upon the premises, processed and sold.

-9-

The Lessee is to have the right of immediate possession to the premises and property herein the subject of this Lease upon the execution of this Agreement.

C O P Y

C O P Y

It is understood and agreed that this contract shall continue in full force and effect so long as the lessee pays to the lessor the sum of $100 per month. In the event the lessee commences operations under the terms of this lease to produce minerals and/or placer from the properties controlled by the lessor, the payment of $100 per month shall be considered as advance royalty as herein before stated in paragraph seven.

-11-

Lessee agrees to render the Lessor quarterly a true and exact statement of the amount and type of ores mined and sold from properties described under this agreement.

-12-

The payment of royalty under the terms of this agreement shall be monthly.

-13-

All payments are to be made under the terms of this Agreement by depositing the amounts due to the account of Lessor in the First National Bank of the Black Hills, Spearfish Office, Spearfish, South Dakota or to Lessor in person .

-14-

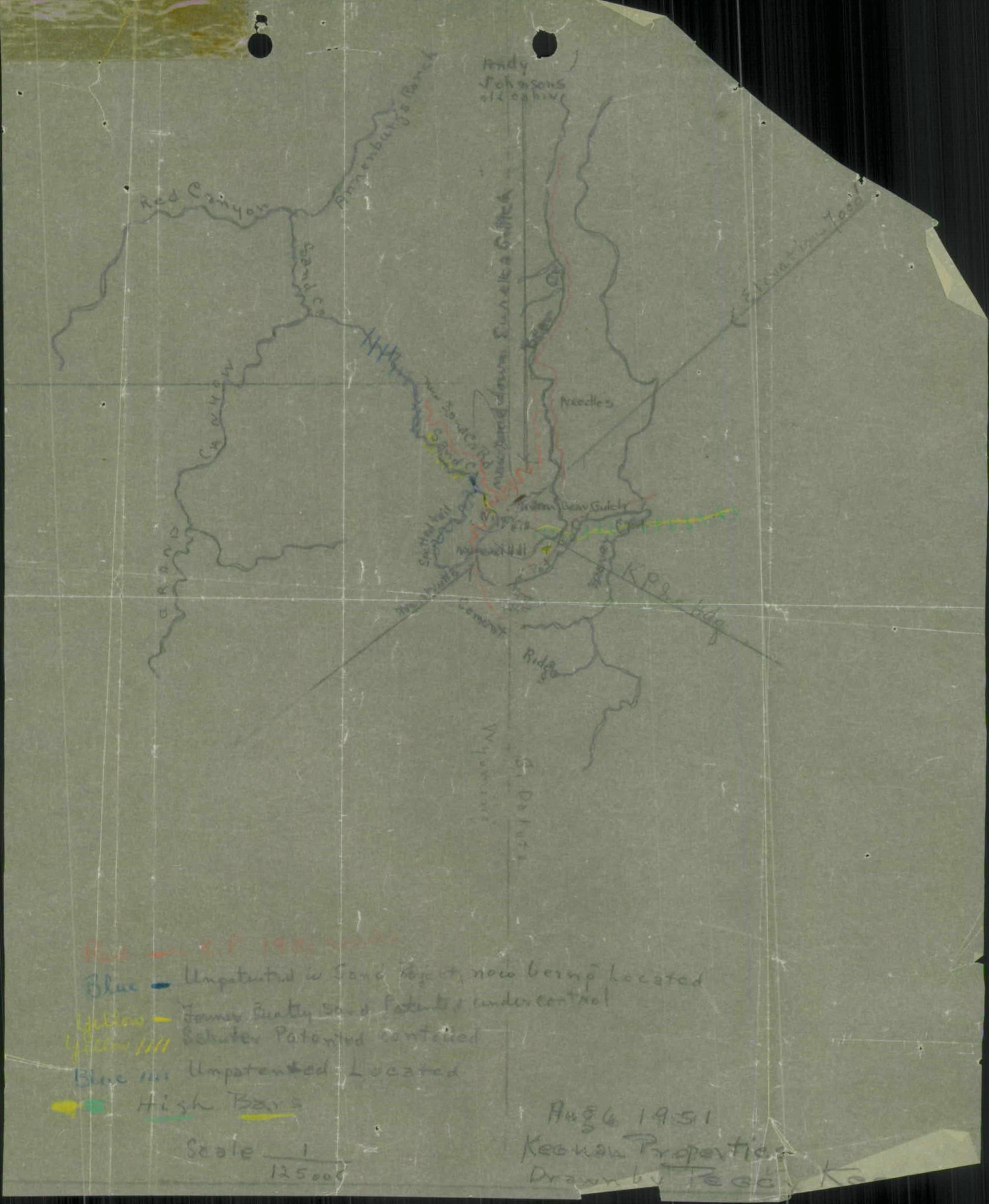
Time os of the essence of this agreement. This Agreement shall be binding upon both parties hereto, their heirs, assigns, and legal representatives.

The parties hereto hereby state that true and correct copy of the above and foregoing Agreement was delivered to them at the time of execution of this Agreement and further that they acknowledge receipt of the same.

IN WITNESS WHEREOF We have hereunto set our hands and seals on this the date first written above.

s/Lillian Fillmore s/W. O. Fillmore
Lessor

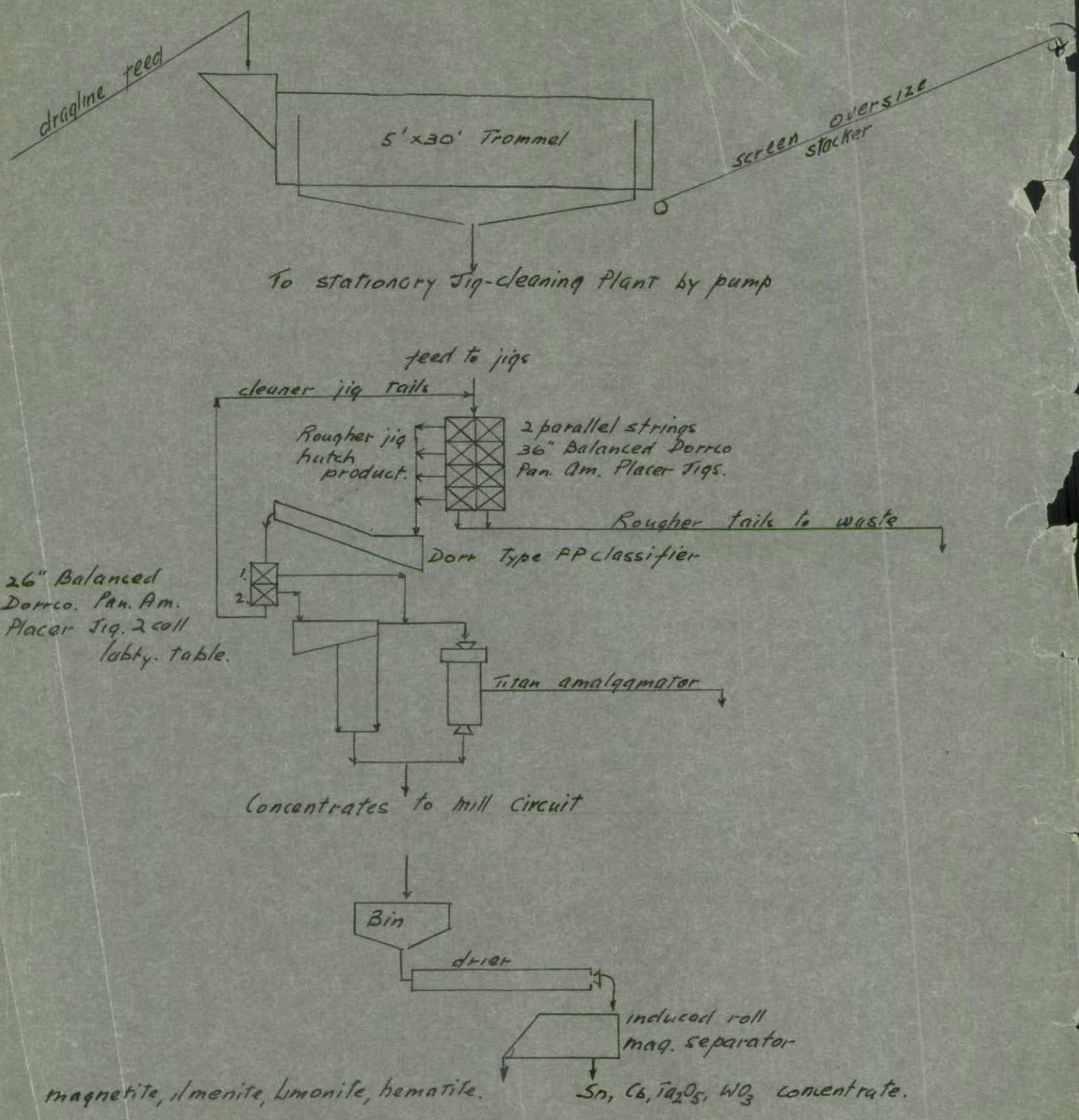
s/Roberta Simmons s/Peggy Keenan
Lessee


Andy Johnsons old cabin
Red Canyon
Pennsylvania's Ranch
Sand Ck
Needles
Beaver Gulch
Ridge
Blue — Unpatented in Sand Ck, now being Located
Yellow — Former Beatty Sand Patents under control
Yellow /// Schuler Patented contested
Blue /// Unpatented Located
High Bars
Scale 1/125000
Aug 6 1951
Keenan Properties
Drawn by Peggy Ka

Lma 654

Placer Operation Flowsheet.

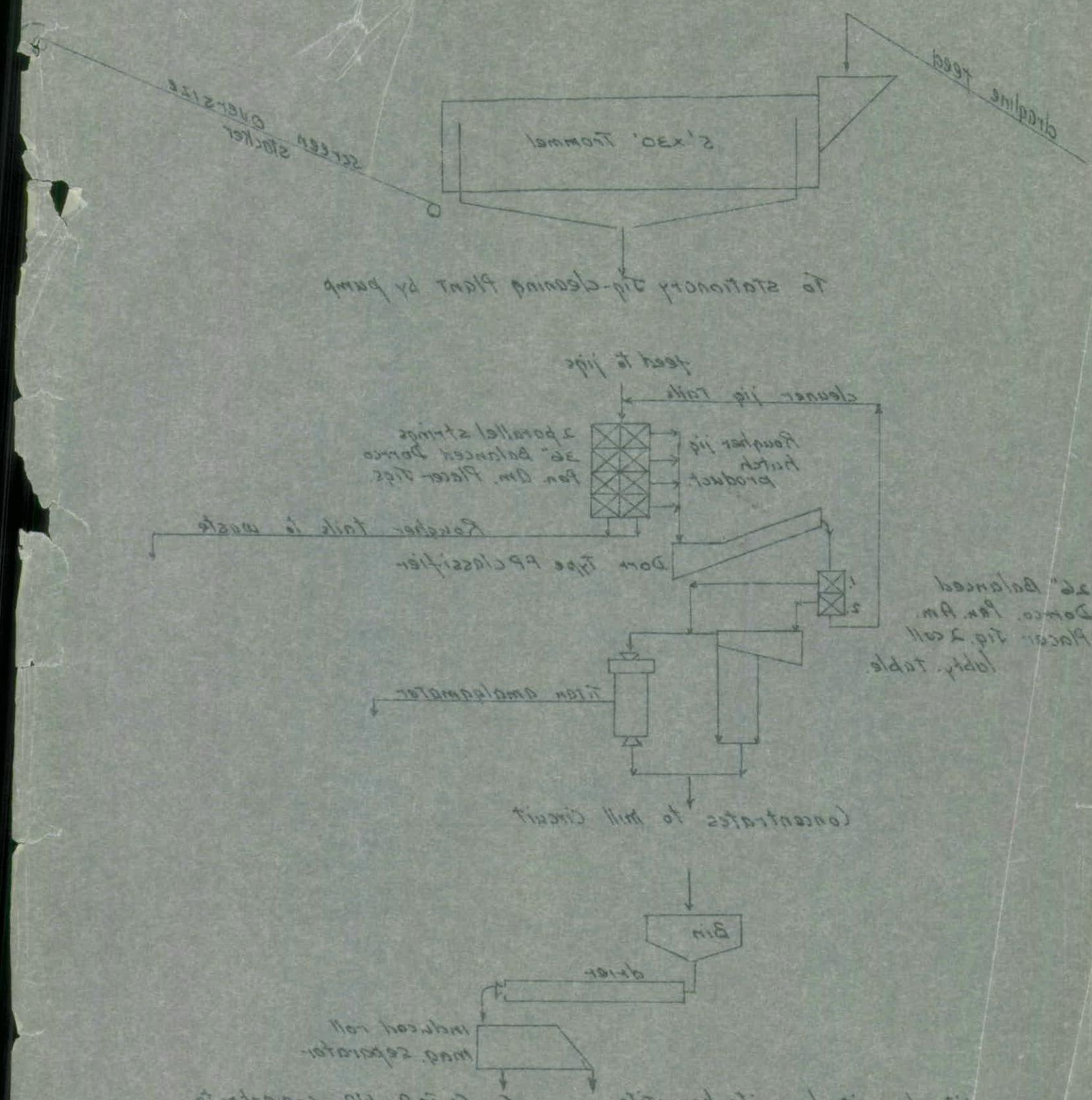
Capacity 2500 cu. yds per 24 hours.



Note: Coarse Au recovered from #1. hutch basket, cleaner jig. Iron biprodu shipped direct to Rapid City Cement Co. Sn, Cb-Ta, WO_3 to Texas City. and G.S.A. Stockpile as per contracts, 1950.

Plant Operation Flowsheet.

Capacity 2500 cu.yds per 24 hours.



Note: Cassiterite recovered from #1 hutch bucket, cleaner jig, from Lightning shipping direct to Raglin City Cement Co. Sn, Cb-Ta, WO3 is taken City mill F.S.A. Stockpile as per contracts, 1950.

~~[illegible]~~
Journal

4/25

Dear Landon –

I believe this exhibit was left out of the Keenan file, DMA 654. I should appreciate it if you will transmit it to Charlie Murphy as part of the docket.

Bill Broadgate

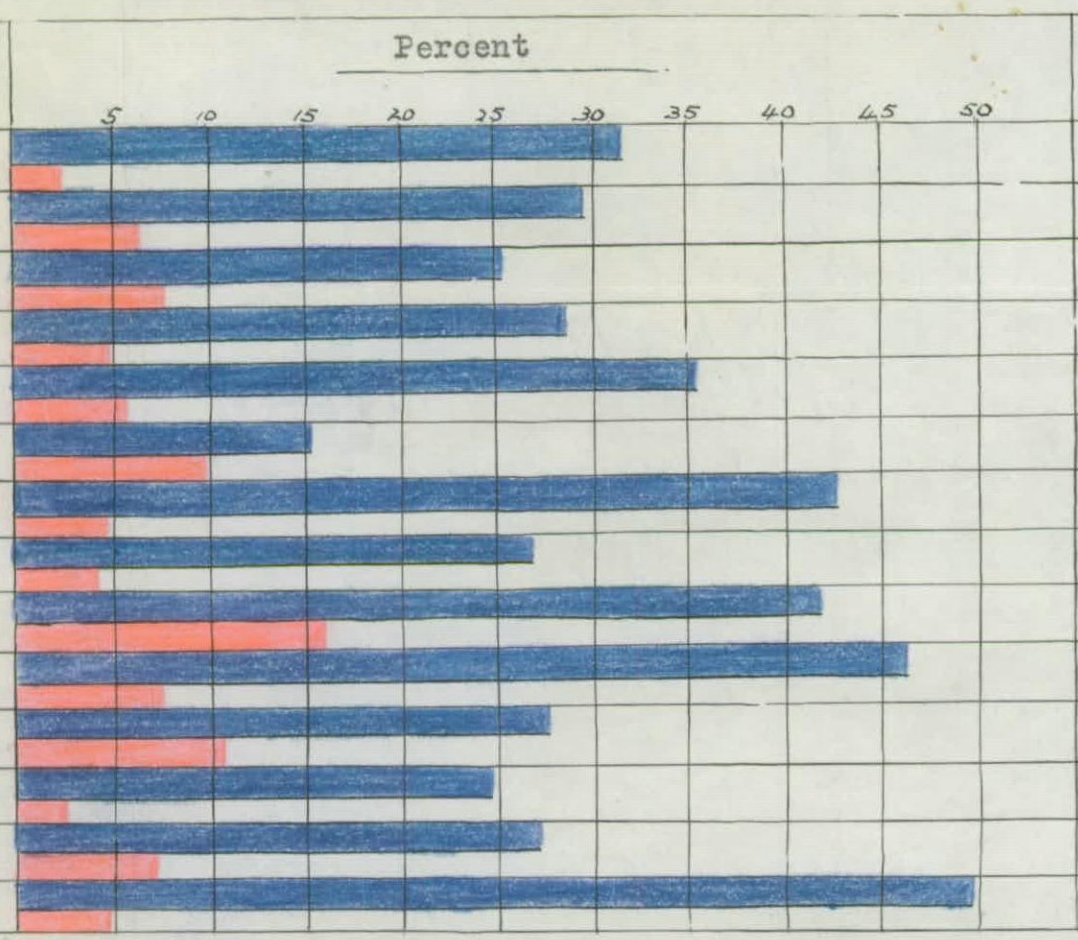
Ex - A.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 2 6 1951
LANDON F. STROBEL
Executive Secretary

RATIO OF TIN TO TUNGSTEN

As Certified by Analysis Certificates on Keenan Properties
Placer Gravel Concentrates.

Tin -
Tungsten -
Columbite-tantalite percentages shown in right hand column.



Assays	Columbite-tantalite %
22	7.2
I3	7.25
8	9.9
I (a)	not analysed
I (b)	4.09
I (c)	12.02
I (d)	not analysed
I (e)	8.25
I (f)	17.35
I (g)	3.28
I (h)	"present"
I (i)	8.6
I (k)	II.5
8 (m)	9.9

Note: Item one shows average percentages of 22 different assays.
Item two shows average percentages of 13 different assays.
Item three shows average percentages of 8 different assays.

The above 43 assays are part of Placer survey report data, as certified by Oscar N. Bribach, Aurora, Colorado.

(a) - Tin Processing Corp. (Longhorn Smelter) 8/II/1948
(b) -F.C. Broeman Co, Cincinatti, #AF-328I-2 (minus ½inch material)
(c) - F.C. Broeman Co, " " (plus ½inch ")
(d) - Wah Chang Corp, New York, letter I0/4/1948
(e) - F.C. Broeman Co, Cincinatti, #FIBEM dated I2/I/1948
(f) - Wah Chang Corp, New York, #X-I I/2I/1949
(g) - Ledoux & Co, Inc. New York. #636I5I dated 9/2I/1949
(h) - Walker & Whyte Inc., New York, 9/6/1949
(i) - Oscar N. Bribach, Aurora, Col. December 5, 1949
(k) - Oscar N. Bribach, " December 5, 1949
(m) - Shows the average percentage of 8 different assays on concentrates produced by Pilot Plant Operation, Certified by Oscar N. Bribach.

KEENAN PROPERTIES
Spearfish, South Dakota

DEPOSITION

Referring to the title of certain Placer Stream Gravel not otherwise mentioned in leases or agreements submitted by Keenan Properties, we herewith state that the Patented Elizabeth Claims numbered 9,10,11 and 12, together with the Elizabeth Nos. 7,8,13 and 14, all situated on Bear Gulch, in Rawlins Mining District, Lawrence County, South Dakota, have been assigned and conveyed to Peggy Keenan, under Assignment and Conveyance and Quit Claim, dated 14 June 1948, filed 26 July 1948, and recorded in Book 301, page 157 to 164. This Assignment and Conveyance, dated 14 June 1948 was by B.T. Spalding, Riverside, California.

I certify that the above is a true statement.

Peggy Keenan

Peggy Keenan
d/b/a Keenan Properties

Subscribed and sworn to before me this 16 day of July, 1951.

Geo. S. Blake

Notary Public, South Dakota.

KEENAN PROPERTIES
Spearfish, South Dakota

DEPOSITION

Referring to the lease titles of certain placer stream gravels not otherwise mentioned in leases submitted by Keenan Properties, we herewith state that the unpatented claims known as the Daisy, Dasy No. 1 and Daisy No. 2, together with the claims known as the Belmont, the Belmont Nos. 1 to 4 inclusive, situated on Potato Creek in Section 20, Township 5 N. Range I.E. bounded on the southwest by the Panot lodes and on the northeast by placer survey 392, are part of the W. O. Fillmore Lease dated 8 August 1948. Attached hereto are 6 photostats of the Potato Creek map with corrections.

I certify that the above is a true statement.

Peggy Keenan
Peggy Keenan
d/b/a/ Keenan Properties

Subscribed and sworn to before me this 26 day of June, 1951.

Katherine Sullivan
Notary Public, D. C.

My Commission Expires Dec. 31, 1953

AFFIDAVIT TO AND FOR THE USE OF PEGGY KEENAN

STATE OF SOUTH DAKOTA)
) ss
COUNTY OF LAWRENCE)

W. O. FILLMORE, being first duly sworn on his oath deposes and says:

That he is one of the persons named as Lessor in a certain Lease Agreement bearing date of November 1, 1949; That said agreement leases certain mining properties to Peggy Keenan and refers to said properties as U. S. Mineral Survey No. 1787; Affian further states that said Lease Agreement covers and includes within its terms those mining claims known as the UNION, UNION NO.3, UNION NO. 5, UNION NO. 7, BOSTON NO. 5 and the BALTIC; Affiant further states that said Lease Agreement is presently valid, binding and in full force and effect for this the year 1951.

W O Fillmore

Subscribed and sworn to before me this 15th day of July, 1951.

Charles E. Carrell
Notary Public, Lawrence County,
South Dakota

My commission expires June 10, 1954.

ADDENDUM

WHEREAS, the parties hereto did, on or about the 27th day of August, 1948, enter into a mining lease concerning certain mining property situated in Lawrence County, South Dakota and Crook County, Wyoming; and whereas it is agreed between the parties hereto that there was omitted from said lease certain mining claims and mining properties which should have been included, now therefore:

It is hereby agreed by and between the parties hereto that the following described property shall be included in and subject to all the terms and conditions of said mining lease, said mining property being described as follows, to-wit:

> All that portion of Potato Creek lying between M. S. 392 and the Parrot Lodes, the same being situated in the Rawlins Mining District in the vicinity of Tinton, South Dakota.
>
> All that portion of Upper Beaver Creek lying above M. S. 392, the same being situated in the Rawlins Mining District and in the vicinity of Tinton, South Dakota.

It is agreed that, while the descriptions above made are general in nature, the parties hereto will forthwith and within the next thirty days enter into a lease concerning the same property, which will more definitely and accurately describe the mining properties here involved.

W. O. Fillmore

Peggy Keenan

STATE OF SOUTH DAKOTA)
)SS
COUNTY OF LAWRENCE)

On this the 15th day of July, 1951, before me, Charles E. Carrell, the undersigned officer, personally appeared W. O. Fillmore and Peggy Keenan Stanwell-Fletcher, known to me or satisfactorily proven to be the persons whose names are subscribed to the within instrument, and acknowledged that they executed the same for the purposes therein contained.

In witness whereof I hereunto set my hand and official seal.

Charles E. Carrell
Notary Public

My commission expires
June 10, 1954.

RECIPT

WHEREAS, there will be accrued as of January 1st, 1951, royalties in the sum of Three Thousand Five Hundred Dollars ($3500.00) under that certain Lease dated November 1st, 1949, (of the mining property known as j Connor's ground U.S. Mineral Survey No. 1787) between the said Miss Peggy Keenan and the undersigned.

In consideration of the payment by the Lessee to the Lessor of Five Hundred Dollars ($500.00), receipt of which is hereby acknowledged, representing part of the accumulated 1950 royalties under said Lease, and upon the payment, on or before January 1st, 1951, to the Lessor by said Lessee of the balance of 1950 royalties in the sum of Three Thousand Dollars ($3000.00), the period of said Lease shall run for fifteen (15) years from November 1st, 1949, provided the stipulated advance royalties are paid.

IN WITNESS WHEREOF we have hereunto set our hands and seals on this 24th day of Oct., 1950.

WITNESSES:

_____

_____

_____

_____

STATE OF SOUTH DAKOTA)
) SS
COUNTY OF LAWRENCE)

Before me, a Notary Public in and for said County and State, personally appeared William O. Fillmore and acknowledged the signing of the foregoing agreement to be his own free act and deed.

_____

IN WITNESS WHEREOF I have hereunto set my Notarial seal this 24th day od Oct., 1950.

_____

My Commission Expires _____.

Accepted:

R E C E I P T

I hereby acknowledge that I have this 24th day of October, 1950, received of Miss Peggy Keenan, of Spearfish, South Dakota, Three Hundred and Fifty Dollars ($350) in full and final payment of all royalties provided for in the lease dated August 7, 1948 (of the mining property known as the Parrot Lode, the Parrot Lodes numbers one to seven inclusive, consisting of approximately 160 acres; the Rob Roy Lode claims numbers one, two and three and Rob Roy Fraction, mining survey 1877, consisting approximately 60 acres', the Mayflower, the Mayflower claims numbers one to seven inclusive mineral survey 1879, and the Mayflower Addition, consisting of approximately 170 acres, the Bear Gulch mining property consisting of the White Chief, the Eureka, and the Provenier No. 2 approximately 57.30 acres) between the said Miss Peggy Keenan and the undersigned, to January 1, 1951.

I also hereby further agree that the aforementioned lease shall run for a period of fifteen years from August 7, 1948, so long as the stipulated advance royalties are paid.

IN WITNESS WHEREOF we have hereunto set our hands and seals on this the date first written above.

WITNESSES:

_____ _____

_____ _____

State of South Dakota)
: SS
County of Lawrence)

Before me a Notary Public in and for said County and State personally appeared William O. Fillmore and acknowledged the signing of the foregoing Agreement to be his own free act and deed.

_____

IN WITNESS WHEREOF I have hereunto set my Notarial seal this 24th day of Oct. 1950.

_____

State of South Dakota)
: SS
County of Lawrence)

Before me a Notary Public in and for said County and State personally appeared Lillian G. Fillmore and acknowledged the signing of the foregoing Agreement to be her own free act and deed.

_____

IN WITNESS WHEREOF I have hereunto set my Notarial seal this 24th

day of Oct. 1950.

_____

District of Columbia)
: SS
City of Washington)

Before me a Notary Public in and for said County and State personally appeared Peggy Keenan and acknowledged the signing of the foregoing Agreement to be her own free act and deed.

_____

In WITNESS WHEREOF I have hereunto set my Notarial seal this day of 1950.

_____

COLLATERAL NOTE - JUDGMENT CLA   No. 150 REVISED FEB. 1936   GEO E COLE & CO CHICAGO LEGAL BLANKS

$ 10,232.00   November 12, 1949

On or before January 1, 1951, after date, for

Value Received, I Promise to Pay to the

Order of ARNOLD H. MAREMONT, DAVID E. BRIGHT and VICTOR NEMEROFF

the sum of Ten Thousand Two Hundred Thirty-two ($10,232.00)-----DOLLARS,

at American National Bank and Trust Company of Chicago, Chicago, Illinois, with interest at the rate

of five per cent per annum after December 31, 1949, until paid.

The undersigned hereby transfers, pledges and delivers to the payee as collateral security for the payment of this note the following property:

An undivided Thirty-one and two-thirds per cent. (31-2/3%) of the entire Lessee's interest in, to and under that certain Lease Agreement, dated July 16, 1948, and filed for record in the office of the Register of Deeds of Lawrence County, South Dakota, on September 2, 1948, in Book 301, at Page 204; and, also, an undivided thirty-one and two-thirds per cent. (31-2/3%) of the entire Lessee's interest in, to and under that certain Mining Lease dated August 7, 1948, and filed for record in the office of the Register of Deeds of Lawrence County, South Dakota, on September 2, 1948, in Book 301, at Page 210,

which property or any part thereof the undersigned hereby gives the payee or holder hereof authority to sell, assign and deliver at or after maturity of this note, XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXX,

at public or private sale without demand of payment or notice to the undersigned, and without advertising said sale, and at such sale the payee or any holder hereof may become the purchaser of said collateral free from any right of redemption; and after deducting all costs and expenses, including reasonable attorneys' fees, from the proceeds of such sale or sales, the remainder shall be applied to the payment hereof, the overplus to be returned to the undersigned; and, in case the proceeds of such sale or sales be insufficient to cover the principal, interest and expenses, the undersigned promises to pay the deficiency forthwith. If this note be signed by more than one person, every obligation of the undersigned shall be joint and several.

And to further secure the payment hereof, the undersigned does hereby authorize irrevocably any attorney of any court of record to appear for the undersigned in such court, during term time or vacation, at any time after maturity and to confess judgment without process against the undersigned in favor of the holder of this note, for such amount as may appear to be unpaid thereon, together with interest, costs and reasonable XXXXX attorneys' fees, and to waive and release all errors which may intervene in any such proceedings and consent to immediate execution upon said judgment, hereby ratifying and confirming all that said attorney may do by virtue hereof.

If this note be signed by more than one person, every obligation of the undersigned shall be joint and several. The maker agrees to apply, monthly after December 12, 1949, 10% of the net income, before Federal taxes, from the operation of the properties described in the aforesaid leases, to the prepayment of this note.

Due January 1, 1951.

Peggy Keenan   [illegible] Fletcher

December 12, 1949 [illegible] amount of $13.66 is credited on the within note. Balance $10,218.34 – O'Brien, Spiegel, Wyatt & Rubin
By [illegible]

On October 30, 1951, at 11:00 o'clock in the forenoon, Central Standard Time, at the south entrance of the County Building, situated on Washington Street, between Clark Street and La Salle Street, in the City of Chicago, County of Cook and State of Illinois, the property described in the within note, together with an undivided 31-2/3% interest in all personal property used or obtained in connection therewith, was offered for sale at public sale for cash to the highest and best bidder therefor, and thereupon Arnold H. Maremont, David E. Bright and Victor Nemeroff bid therefor the sum of $7,500.00, and that being the highest and best bid made, said property, together with an undivided 31-2/3% interest in all personal property used or obtained in connection therewith, was sold to said Arnold H. Maremont, David E. Bright and Victor Nemeroff, and said amount of $7,500.00 bid therefor by them was thereupon applied as follows:

To the payment of interest on the balance of $10,218.34 unpaid on the within note at the rate of 5% per annum from December 31, 1949 to October 30, 1951 -	$ 936.68
On account of principal due on the within note -	6,563.32
Total	$7,500.00

thereby leaving a balance unpaid on the within note in the amount of $3,655.02, with interest thereon at the rate of 5% per annum from October 30, 1951.

[illegible]

COLLATERAL NOTE

TO

DUE

$

GEORGE E. COLE & COMPANY

To Peggy Keenan Stanwell-Fletcher
Box 341
Spearfish, South Dakota
and
To Whom It May Concern

PUBLIC NOTICE IS HEREBY GIVEN that on Tuesday, the 30th day of October, A. D. 1951, at 11:00 o'clock in the forenoon, Central Standard Time, at the south entrance of the County Building, situated on Washington Street, between Clark Street and La Salle Street, in the City of Chicago, County of Cook and State of Illinois, the undersigned will sell, at public sale, for cash, to the highest and best bidder therefor, the leasehold interest and personal property hereinafter described, or so much thereof as may be necessary to pay Ten Thousand Two Hundred Eighteen Dollars and 34/100 ($10,218.34), together with interest thereon at the rate of five percent (5%) per annum from December 31, 1949, costs and attorneys' fees in connection with said sale, said Ten Thousand Two Hundred Eighteen Dollars and 34/100 ($10,218.34) being the balance due on a certain principal promissory collateral note executed by Peggy Keenan Stanwell-Fletcher, dated November 12, 1949, due on or before January 1, 1951, in the principal sum of Ten Thousand Two Hundred Thirty-two Dollars and no/100 ($10,232.00), bearing interest at the rate of five percent (5%) per annum from December 31, 1949.

The collateral security held securing the above mentioned note which is to be sold, consists of the following:

1. An undivided thirty-one and two-thirds percent (31-2/3%) interest of the entire Lessee's interest in, to and under that certain Lease Agreement dated the 16th day of July, A. D. 1948, between Dakota Tin and Gold Company, a South Dakota corporation, as Lessor, and Peggy Keenan, as Lessee, covering the following described land in the County of Lawrence and State of South Dakota, to-wit:

The Homeward Bound Claim, The Homeward Bound Fraction, part of the Mineral Survey 1879, including the George, George #1, George #2, George #3, the Golden Star, Golden Star #1, Golden Star #2, the Oma, the Oma Fraction; and the Jarosh Claims, including the Jarosh, Jarosh #1, Jarosh #2, Jarosh #3, Jarosh #4, Jarosh #5, Jarosh #6, Jarosh #7, and Jarosh #8,

which Lease Agreement was filed in the office of the Register of Deeds of Lawrence County, South Dakota, in Book 301 at Page 204, together with an undivided thirty-one and two-thirds percent (31-2/3%) interest in all personal property used or obtained in connection with said Lease Agreement,

and also

2. An undivided thirty-one and two-thirds percent (31-2/3%) interest of the entire Lessee's

interest in, to and under that certain Mining Lease dated the 7th day of August, A. D. 1948, between W. O. Fillmore, of Spearfish, South Dakota, as Lessor, and Peggy Keenan, as Lessee, covering the following described land in the County of Lawrence and State of South Dakota and in the County of Crook and State of Wyoming, to-wit:

> The Parrot Lode, the Parrot Lodes numbers one to seven inclusive, consisting of approximately 160 acres; the Rob Roy Lode claims numbers one, two and three, the Rob Roy Fraction, mining survey 1877, consisting of approximately 60 acres; the Mayflower, the Mayflower claims no's one to seven inclusive, survey 1879, and the Mayflower Addition, consisting of approximately 170 acres, the Bear Gulch mining property consisting of the White Chief, the Eureka, and the Provenier no. two, approximately 57.30 acres all in Lawrence County, South Dakota and the Madeline Lode mining claim, the Madeline claims numbers one to seven inclusive, consisting of approximately 160 acres, said Madeline Lodes located in Crook County, Wyoming,

which Mining Lease was filed for record in the office of the Register of Deeds in and for Lawrence County, South Dakota, in Book 301 at Page 210, together with an undivided thirty-one and two-thirds percent (31-2/3%) interest in all personal property used or obtained in connection with said Mining Lease.

Said sale will be made pursuant to the powers granted by said Peggy Keenan Stanwell-Fletcher in said principal promissory collateral note above described, in which note the payee or holder thereof is given full power at or after maturity, without demand of payment or notice of any kind, to sell said collateral at public or private sale and without advertising said sale, and notice is now given that on the 30th day of October, A. D. 1951, there will be due on the aforementioned principal promissory collateral note the principal sum of Ten Thousand Two Hundred Eighteen and 34/100 ($10,218.34) for which amount, together with interest thereon at the rate of five percent (5%) per annum from December 31, 1949, and the costs and ex enses of making such sale, including reasonable attorneys fees, said collateral will be offered for sale to the highest and best bidder therefor as above stated.

Said aforementioned principal promissory collateral note of said Peggy Keenan Stanwell-Fletcher for which said collateral was pledged as security, together with said

collateral, are in the possession of D'Ancona, Pflaum, Wyatt & Riskind, attorneys for the undersigned, at their office, Room 2200, 33 North La Salle Street, Chicago, Illinois, and may there be inspected by any prospective purchaser or bidder at any time before the date of said sale and the said principal promissory collateral note and said collateral to be sold, as aforesaid, will be present and open for inspection at the time of said sale.

Dated at Chicago, Illinois, this 19th day of October, A. D. 1951.

David E. Bright

Veta Hemkoff

Arnold V. Marmat

By [illegible]
Their Attorney-in-Fact

STATE OF ILLINOIS)
) SS:
COUNTY OF COOK)

Joe Cortes, being first duly sworn on oath, deposes and says that he delivered a true and correct copy of the within notice on the within named Peggy Keenan Stanwell-Fletcher by sending the same by United States Registered Air Mail, postage and registration fee prepaid, in an envelope addressed to Peggy Keenan Stanwell-Fletcher at Box 341, Spearfish, South Dakota, on the 19th day of October, A. D. 1951, between the hours of 11:00 and 12:00 O'clock, A.M., on said day, which said envelope was mailed at the United States Post Office Postal Station situated at 166 North La Salle Street, Chicago, Illinois.

Deponent further says that on the 19th day of October, A. D. 1951, he affixed a true and correct copy of the within notice to the bulletin board situated at the south entrance of the County Building in the City of Chicago, County of Cook and State of Illinois, which said south entrance of said County Building is located on Washington Street between Clark Street and La Salle Street in said city, county and state aforesaid.

Joe Cortes

SUBSCRIBED and SWORN to before me this 19th day of October, A. D. 1951.

Miriam Stringhoff

Form 3806-S (Rev. 3-49)

Receipt for Registered Article No. 517644 Postmaster per

11:01

Fee paid ..... cents. Class postage .....

Declared value ....., Surcharge paid, $.....

Return Receipt fee ..... Spl. Del'y fee .....

Delivery restricted to addressee:

in person ....., or order ..... Fee paid.....

Accepting employee will place his *initials* in space indicating restricted delivery.

POSTMARK CHICAGO, ILL. OCT 19 1951 A.M. E

07—10—19433-8 GPO

NOTICE TO SENDER—Enter below name and address of addressee as an identification. Preserve and submit this receipt in case of inquiry or application for indemnity.

(Name of addressee) (P. O. and State of address)

Photo Copies By

EASTERN PHOTOPRINT CO., INC.
202 Shoreham Building
Fifteenth and H Streets, N. W.
Washington 5, D. C. NAtional 5934

Date: DEC 3 1951

Docket copy

Murphy

Project Summary Report

By: F. M. Murphy July 24, 1959

1. Docket No. DMEA-654 (Tin, columbium, tantalum, tungsten)
Contract No. Idm-E58

Operator: Northwest Defense Minerals, Inc. (Assignee)
Miss Peggy Keenan, President
1322 Second Avenue, No. 1D
New York 21, New York

The original Operator was Peggy Keenan d/b/a Keenan Properties.

Operator's Property Rights -

Lessor of 47 claims situate in secs. 4, 5, 6, 7, 8, 9, 16, 17, 18, 19, 20, 21, 28, 29, and 30, T. 5 N., R. 1 E., B.H.M., Lawrence County, South Dakota, as follows:

Gold Bond; Gold Bond No. 1; Gold Bond No. 4, Three Jims No. 5; Placer Survey No. 392; Belmont and Belmont Nos. 1, 2, 3, and 4; Daisy; Daisy No. 2; Golden Star No. 2; Oma and Oma Fraction; Mayflower Nos. 1, 2, 3, and 4; Union; Union Nos. 3, 5, and 7; Elizabeth Nos. 7 through14; Placer claim Lot No. 393; Harkness; Harkness Nos. 1 through 8; Homeward Bound; Homeward Bound Fraction; Golden Star; Perret Nos. 2, 3, and 5; and Boston No. 5.

2. Contract dated July 16, 1951.

Amendments:

No. 1, August 31, 1951, allows test shafts in lieu of trenches; provides for rental of passenger car, pickup, dragline, and pumps; and increases laborers to six men and their rates from $1.00 to $1.57½ per hour with time and a half for overtime.

No. 2, May 8, 1952, increases total labor and supervision costs in Phase I from $2300.00 to $2681.96.

No. 3, October 28, 1952, adds leased land to Article 2 of contract, and describes the work under Phase II and the estimated cost of performing it ($29,931.00).

No. 4, February 16, 1953, extends completion date to July 1, 1953.

No. 5, May 26, 1953, extends completion date to October 15, 1953.

2. Contract - Amendments (continued)

No. 6, October 26, 1953, extends completion date of Phase I to June 30, 1954, and adds an Annex I relating to certification, royalty payments, etc., and extends royalty payment period to eleven years.

No. 7, May 10, 1954, extends completion date of Phase I to November 1, 1954, and increases royalty payment period to 12 years.

No. 8, November 29, 1954, allows alternate method of concentrating samples, cancels Annex I of Amendment No. 6, and substitutes an Annex II for the provisions of Article 15 of the contract form, and adds certain leased land to Article 2 of the contract.

No. 9, September 22, 1955, allows recess period to November 1, 1955, extends completion date to January 1, 1955, and royalty payment period to 15 years, and an automatic termination if work is not resumed by November 1, 1955.

No. 10, November 22, 1955, changes Item 7 of Phase II from "687 days" to "687 man days," with no change in cost.

No. 11, December 16, 1955, allows Operator to sink the 9 test pits mentioned in Amendment No. 3, Phase II work, at same cost (i.e., 180' @ $25/ft.), and qualifies that no payment shall be made on any test pit until it has been completed.

No. 12, January 6, 1956, modifies method of concentrating metals and minerals.

No. 13, June 14, 1956, extends completion date to October 1, 1956, for processing and analyzing samples only.

No. 14, July 6, 1956, outlines certain special analyses, including gold values, on samples and combined samples.

No. 15, September 19, 1956, extends completion date to November 15, 1956, for sampling and analytical work only.

Government's Consent to Assignment of Contract to Northwest Defense Minerals, Inc., December 13, 1954.

Termination Agreement August 15, 1958, includes specifications regarding samples and concentrates.

Phase I exploration started August 13, 1951, and was completed September 22, 1951. Phase II exploration started September 27, 1955, and was completed November 15, 1955. The difference in time between the latter date and termination of the contract was to allow the Operator time to concentrate and analyze the samples received.

3. Certification of discovery issued May 29, 1959.

4. Work authorized and completed:

Original contract of $100,000.00 was modified to $48,931.00 by Amendment No. 3:

Authorized and Accepted Costs

Stage I (9 trenches) - Costs adjusted by Amendment No. 2

Labor and Supervision	$ 7,915.84	
Supplies	1,292.69	
Equipment (rental)	6,797.54	
Miscellaneous	2,203.93	
Transportation and analysis of samples	790.00	
Total Stage I		$19,000.00

Stage II (Authorized by Amendment No. 3)

Churn drill, 1600' @ $5.50/ft.	$ 8,800.00	
Nine test pits, 180' @ $25.00/ft.	4,500.00	
Supervision, 100 days @ $50.00/day	5,000.00	
Materials & Supplies	350.00	
Pickup (rental), 3½ months @ $160.00/mth.	560.00	
Analytical work, 89 samples @ $25.00/sample	2,225.00	
Meals & Travel	6,496.00	
Contingencies	2,000.00	
Estimated total cost		$29,931.00

4. Work Authorized and Completed (continued):

Stage II (continued):

Churn drill, 348.5 feet	$1,742.50	
Test Pits, 31.5 feet	787.50	
Bulldozing trenches	263.50	
Labor & Supervision	3,099.93	
Materials & Supplies	517.77	
Miscellaneous	957.39	
Sampling & Analysis (by Operator)	338.00	
Total Actual Costs		$7,706.59
Less disallowance for failure to submit final report		200.47
Total Accepted Costs Stage II		$7,506.12

S U M M A R Y

Total Accepted Cost Stage I	$19,000.00
Total Accepted Cost Stage II	7,506.12
Total Accepted Cost of Project	$26,506.12
Plus Government-incurred cost for processing samples	5,878.22
Actual Total Cost of Project	$32,384.34
Government Participation @ 90%	$29,145.91

5. Audit Report of Review, dated July 13, 1959:

Total cost as billed by Operator	$26,960.02
Exceptions	453.90
Total Accepted Cost	$26,506.12
Government Participation @ 90%	$23,855.51
Less: Prorata share of Government-incurred cost for sample analysis as provided by Termination Agreement: 10% of $5,878.22	587.82
Amount due Operator	$23,267.69

6. Final Reports:

Operator's: not submitted

Field Team's summary:

Final Engineering Report by E. O. Binyon and M. H. Marshall, USBM, received May 28, 1959.

6. Final Reports - Field Team's summary (continued):

The project was designed to explore placer deposits on Bear Creek, Beaver Creek and its tributary, Potato Creek. These creeks drain north from an area of Precambrian schists and pegmatites and derive the strategic minerals found in their placer gravels from the weathering of exposed pegmatites. The gravels are composed predominantly of porphyry boulders and pebbles.

Phase I of the contract consisted of excavating five trenches on Bear Creek and four on Potato Creek. The trenches were excavated principally by bulldozer with a small dragline being used on the deeper trenches. The trenches totaled 1,089 feet in length, with an average width of 8.5 feet and depth of 4.6 feet. Sixty channel samples were cut in the trenches. Twenty-three were concentrated as single samples. The remaining 37 samples were concentrated and then combined to provide representations of individual trenches.

Phase II consisted of 18 churn drill holes aggregating 348.5 feet of drilling and three test pits totaling 31.5 feet in depth, two on Bear Creek and one on Beaver Creek.

Ore Reserves

Combining the ore reserves listed for Phase I in the Final Engineering Report with those listed in J. W. Townsend's memo dated June 19, 1959, to the Chairman, Operating Committee, OME, the total reserves are 342,698 cu. yds. of placer material with an average value of $0.9142/cu.yd., or a total value of $313,324.02.

The principal values are gold, since the tin, columbium-tantalum values represent only about $0.10/cu.yd., based on 1959 metal prices of Au, $35.00/troy oz., Cb-ta, $1.40/lb., Sn. $1.015/lb.

Wolfram values were negligible; therefore, they were not included in the above reserve values.

Comments:

The Operator's administration of the project was very poor. The cost data submitted in most cases were incorrect and often covered items not allowed under the contract. Technical supervision and reports on results of the work were sketchy. Material recovered from churn drill holes and test pits in Phase II was stored for years without being

6. Comments (continued):

processed. Finally, the contract was terminated and the Government processed this material. In view of its poor cooperation, the writer recommends that, if requested, the Government should not enter into another exploration contract with the Operator or its principal, Peggy Keenan.

In reviewing the field examiners' estimate of the gold content of the placer material, the writer notes the high gold values mentioned. If such values are correct, it is surprising that these placer deposits were not mined during the doodle-bug era of 1932-1939.

F. M. Murphy

FMMurphy/gla
7-24-59
cc to: Director's Reading File
Mr. Johnson
Mr. Murphy
Docket
Chron

Form 17
r. 59

OFFICE OF MINERALS EXPLORATION

WORK COMPLETED ANALYSIS

X Certified — After final audit or review report is received, prepare in duplicate. File original in official docket. Send copy to Code 210.

Operator: Northwest Defense Minerals, Inc. (Assignee)

Actual Cost X

State: South Dakota - Lawrence County

Agreed Unit Cost

Final Report of Audit

Commodity: Tin - Columbium - Tantalum - Tungsten

Docket No. DMEA - 654

Final Report of Review July 13/59

Contract No. Idm - E 58

Type of Work (Use these categories only)	Authorized by Contract and Amendments		Completed and Paid for		Net cost after sale of Gov't. Property
	Units	Cost 1/	Units	Cost 1/	
Drifting & Crosscutting					
Raising					
Shafts					
~~Winzes~~ Surface test pits	180'	7601.00	31.5'	1777.00	1777.42
Drilling (Specify) Churn 6" casing	1600'	15939.00	348.5'	5445.00	5444.57
Surface Excavation 5 trenches		17828.00	5	17828.00	17828.04
Underground Excavation					
Roads and Trails					
Operating Equipment Purchased					
Surface Rehabilitation & Repairs					
Underground Rehabilitation					
New Building, Improvements, etc.					
Other (Specify) Sample analysis		7563.00		7334.00	7334.37
Totals		$48,931.00		$32,384.00	2/ $32,384.34

1/ Round off to dollars.
2/ Net cost total must agree with final report of audit or review.

Prepared by F M Murphy Date 7/24/59

52616

November 12, 1953

Memorandum

To: Hazel Berry, Operating Committee

From: Grace L. Ault, Rare & Misc. Metals Division

Subject: Amendment to contract

We have received the Division copy of Amendment No. 6, dated October 6, 1953, which was signed by the Operator in the form prepared in the Washington Office and signed by the Administrator before transmittal to the Region.

Grace L. Ault

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 12 1953

November 10, 1953

Memorandum

To: Operating Committee, Defense Minerals Exploration Administration, Washington, D. C.

From: Executive Officer, Field Team, Region V

Subject: Docket DMA 654X, Contract Idm-E-58, Keenan Properties

Reference is made to your letter of October 27, relative to Amendment No. 6, extending the time of completion and the royalty payment period. Here are the Government, Docket and Division copies of the executed amendment. A copy has been transmitted to the Regional fiscal section, and copies have been retained by the operator and this office.

All copies of the original version of Amendment No. 6 written in this office have been destroyed.

A. B. Needham
A. B. NEEDHAM

Attachments

cc 11-12

cc 11-12

FILE COPY
SURNAME:

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

Horace A. Tenss, Esq.
52 William Street
New York 5, N. Y.

Re: Docket No. DMA-654X
Contract No. Idm-X58
(Tin, columbium, tantalum, tungsten)
Peggy Keenan d/b/a Keenan Properties
Lawrence County, South Dakota

Dear Mr. Tenss:

This will acknowledge your letter of November 3, 1953, requesting that we supply you with a copy of Mineral Order No. 5 entitled "Regulations Governing Government Aid to Defense Exploration Projects".

Mineral Order No. 5 has been superseded by DMEA Order-1; therefore, we are enclosing a copy of this order, together with Amendments 1, 2 and 3.

Sincerely yours,

SIGNED

Ernest Wm. Ellis, Chief
Rare & Misc. Metals Division

EWEllis/gla
11-9-53
cc to: Adm. Reading File
Docket
Mr. Ellis
DMEA Field Team, Region V (2)

R.C.S.
11-10-53

11/9/53 gla

HORACE A. TEASS
COUNSELLOR AT LAW

TELEPHONE HANOVER 2-4750

52 WILLIAM STREET
NEW YORK 5, N.Y.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 9 1953

November 3, 1953

Ernest Wm. Ellis, Chief
Rare and Miscellaneous Metals Division
Defense Minerals Exploration Administration
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMA-654X
Contract No. Idm-E58
(Tin, columbium, tantalum, tungsten)
Peggy Keenan d/b/a Keenan Properties
Lawrence County, South Dakota

Dear Mr. Ellis:

I thank you for your letter of October 23 with respect to the above-mentioned matter.

I regret that your letter does not make the matter entirely clear to me but maybe Miss Keenan can clarify the situation without the necessity of my troubling you further at this time.

If Mineral Order No. 5 entitled "Regulations Governing Government Aid to Defense Exploration Projects" is available for distribution, I would appreciate your supplying me with a copy thereof.

Your courtesies in this matter are appreciated.

Sincerely yours,

Horace A. Teass

HAT:G

FILE COPY
SURNAME:

140

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

OCT 27 1953

Mr. A. B. Needham
Executive Officer
DMEA Field Team, Region V
2908 Colfax Ave., South
Minneapolis 8, Minnesota

Re: Docket No. DMA-654X (Tin)
Keenan Properties
Lawrence County, South Dakota
Contract No. Idm-E58

Dear Mr. Needham:

With reference to your memorandum to the Operating Committee dated October 14, the original and two copies of Amendment No. 6 enclosed therein are herewith returned.

You were unauthorized to sign this Amendment because it extends the time for the performance of the work beyond two years. This office does not object to the extension, but also desires to use the Amendment to replace the royalty provisions of this old form contract with the newer ones of the later forms.

There is enclosed Amendment No. 6 duly signed by the Administrator. Please have it signed by the Operator and make the usual distribution thereof, when all copies of the original Amendment No.6 have been returned to you and destroyed.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (JHB)

AEKane/ema 10-21-53

cc: Mails & Files
Adm. R. File
Op. Comm.
Mr. Thayer
Mr. Hedges
Mr. Ellis
A. E. Kane
J. L. Hofflund
Chron.
Pending

Enclosures

Approved:

J. H. Hedges

Member, Bureau of Mines (JHB)

T. P. Thayer

Member, Geological Survey (JHB)

R.C.G. 10-27-53

FILE COPY
SURNAME:

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

OCT 23 1953

Horace A. Haase, Esq.
52 William Street
New York 5, N. Y.

Re: Docket No. [illegible]
Contract No. [illegible]
([illegible], columbium, tantalum, [illegible])
Peggy Keenan d/b/a Keenan Properties
Lawrence County, South Dakota

Dear Mr. Haase:

This will acknowledge receipt of your letter dated October 17, 1953, pertaining to the Keenan properties in Lawrence County, South Dakota.

It is noted that you quote from one of the provisions of the captioned contract wherein the operator is required to do certain sampling and submit a complete report of the results from said sampling. Apparently you are under the impression that the Bureau of Mines did this sampling and reported accordingly. This is not the case. Any samples taken by the [illegible] are separate and apart from sampling specified for the contract. We regret to advise you that reports prepared by Government agency personnel, as well as all data obtained as a result of the exploration work, are of a confidential nature and cannot be made available for public use, or even given to the operator under the contract concerned. Therefore, we are unable to comply with your request.

It is further noted that you have [illegible] operator's [illegible] information in order to [illegible] currently proceed with the exploration [illegible]. When the request for lease [illegible] was received, the scope of the new work was taken on the [illegible] of the operator for lease [illegible] together with the [illegible] of the Government representatives. Thus the proposed new work and [illegible] by the operator and approved by the [illegible].

[illegible] will undertake [illegible] this matter.

Sincerely yours,

SIGNED

[illegible]
Assistant Secretary
Defense Minerals

Ellis/gla
10-22-53
cc to: Gen. Mgr. File
Docket ✓
Mr. Ellis
[illegible] Field Com., Rep. V (2)

R.C.G.
10-23-53

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

October 19, 1953

Memorandum

To: Hazel Berry, Operating Committee

From: Grace L. Ault, Rare & Misc.Metals Division

Subject: Docket No. DMA-654X (Tin)
Contract No. Idm-E58
Keenan Properties

Mr. Knouse has reviewed Amendment No. 6, dated October 5, 1953, and approves it. This amendment extends the completion date of Phase 2 to June 30, 1954. He suggests, however, that the amendment be reviewed by the Legal Division, and the following question be considered:

How about extending the repayment period to eleven years because of the extension in excess of two years?

Grace L. Ault
Grace L. Ault

RECEIVED
OCT 20 1953
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 20 1953

HORACE A. TEASS
COUNSELLOR AT LAW

TELEPHONE HANOVER 2-4750

52 WILLIAM STREET
NEW YORK 5, N.Y.

October 17, 1953

Mr. Ernest Ellis
c/o Rare and Miscellaneous Metals
Defense Minerals Exploration Administration
Department of Interior
Washington, D. C.

Dear Mr. Ellis:

I am endeavoring to assist Miss Peggy Keenan, who is doing business as Keenan Properties, in connection with a mining venture having certain rights in Lawrence County, South Dakota. Miss Keenan has delivered to me, among other papers, an exploration project contract, Docket No. DMA654X, dated July 16, 1951, between the United States of America acting through the Department of Interior, Defense Minerals Administration, and herself. The commodities specified in said contract are tin, columbium, tantalum and tungsten. One of the provisions of said contract in relation to Phase 1 reads as follows:

> "The Operator is to sample carefully the gravel taken from the trenches in accordance with conventional and approved sampling practices and will submit a complete report of the results obtained to the Government upon completion of the project."

Miss Keenan advises me that a representative of the Bureau of Mines undertook to take such samples and make said report and that she as Operator does not have in her possession such a report. It seems to me that the Operator should have such information available in order to proceed intelligently with the undertaking.

Under the circumstances, I believe it is proper and in order to request copies of all such reports and data which the Government obtained as a result of the completion of the exploratory work under Phase 1 of the aforesaid contract. I trust that you agree with me on this and that you will be good enough to supply all such data at an early date. Miss Keenan is quite anxious to proceed.

If in addition to supplying the foregoing information, you have any additional information or should care to express an opinion with respect to the property or the results of the exploration work to date, I would, of course, be very happy to have such information and expression of opinion.

Your courtesies in this matter will be appreciated.

Very truly yours,

Horace A. Tuss

HAT:G

cc: Miss Peggy Keenan
Mr. Frank W. Swacker

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 1 0 1953

October 14, 1953

Memorandum

To: Operating Committee, Defense Minerals Exploration Administration, Interior Building, Washington 25, D. C.

From: Executive Officer, Field Team, Region V

Subject: DMEA-654X, Contract Idm E-58, Keenan Properties

Here are the original and two copies of Amendment No. 6 extending the completion date of Contract E-58, Keenan Properties, to June 30, 1954.

Extension to this time is necessary because in all probability snows will preclude working late in the fall and it's possible the project might be temporarily recessed until early spring. Therefore, the completion date has been extended to provide ample time to do the work.

A. B. Needham
Executive Officer, Field Team
Region V

Att

RECEIVED
OCT 20 1953
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

cee
10/16

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~
Region V
2908 Colfax Avenue South
Minneapolis 6, Minnesota

October 6, 1953

FM-654

Miss Peggy Keenan
605 A -4000 Cathedral N. W.
Washington, D. C.

Dear Miss Keenan:

Here are seven copies of Amendment No. 6 to your D.M.E.A. Contract Iam E-58 for exploration in Lawrence County, S. Dak., extending the completion date of the contract to June 30, 1954.

Because of the likelihood of considerable snow in the area of work, thus holding up or slowing down the work this winter, and the probability that the same condition might preclude an early start next spring, the completion date has been set as June 30 to provide ample time to do the work.

Please sign all copies, retain the carbon, and return the original and other carbons to this office for further distribution.

Very truly yours,

A. B. Needham
Executive Officer
Field Team, Region V

Encs.

cc: C. E. Dutton
J. A. Redden
E. C. Binyon
Operating Comm. (2)

MDS 10/9/53 gla

605A, 4000 Cathedral Ave., N.W.
Washington, D. C.

October 3, 1953

Mr. A.B. Needham, Executive Officer,
Field Team Region V. DMEA,
Department of the Interior,
Minneapolis, Minn.

Dear Mr. Needham:

We are in receipt of the copy of your letter to Mr. Robert W. Michael with approval of his request for revision of our Phase 2 Exploration work. We appreciate this approval.

During the last two meetings in Washington D.C. and New York, I was aware that Mr. Michael was ill. He suddenly had to have surgery. The result was disheartening, as no operation could be performed. We are in hopes the present treatment may help. At the moment, the situation is a delicate one, as he was all set to go to South Dakota. I expect to see him in a few days in New York, and will be advised how to handle our engineering, but the date of going to South Dakota is delayed.

This turn of events makes it necessary for me to request an extension past October 15, 1953, for reasons beyond my control.

Thanking you for past courtesies,

Yours very truly,

Peggy Keenan

Peggy Keenan
d/b/a Keenan Properties.

sf/PK

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

September 17, 1953

Mr. Robert M. Michael
66 Park Avenue
New York 16, N.Y.

Dear Mr. Michael:

Reference is made to your letter of September 15, 1953, regarding certain provisions of the DMEA Docket 65LX, Contract Ids E-58, Keenan Properties exploration project.

This office is in complete agreement with your proposed procedure to screen size the gravel and recover the heavy mineral by hand jigging of each class down to 20 or 30 mesh, with all the finer sizes to be then treated in a Humphrey Spiral in lieu of the panning as discussed on page 2 of "General Conditions." The Humphrey Spiral actually is best on -10 or so down to -200, and below that size recoveries are somewhat low; but despite that we see no objection to your proposal because certainly it is more detailed than that proposed in the contract general conditions.

Relative to the pit samples, you also have permission to stage-wash the samples from top to bottom of the pit to determine the horizon of economic values. Also to run jig tailings to a 14-mesh screen and all minus 14-mesh to be treated with the Spiral.

Please advise Mr. E. O. Binyon, U. S. Bureau of Mines, School of Mines Campus, Rapid City, S. Dak., when you start actual operations in the field.

Very truly yours,

A. B. Needham
Executive Officer, Field Team
Region V

cc: C. E. Dutton
E. O. Binyon
Operating Comm (2)
J. A. Redden
Miss Keenan

ROBERT W. MICHAEL, MINING ENGINEER AND CONSULTANT
SPECIALIST IN DIAMOND WASHING EQUIPMENT
EXAMINATION OF DIAMOND ALLUVIALS

MDS

September 15, 1953

Mr. A. B. Needham
Chief of Region #5 Field Team
DMEA
Department of Interior
Minneapolis, Minn.

Re: DOCKET #DMA-654X
CONTRACT IDM-E58

Dear Sir:

I have been requested to supply supplementary advice in the matter of properly sampling the Keenan Properties.

On Page 2, under "General Conditions", starting at the fifth line where it states the contained minerals shall be concentrated by PANNING, we would request permission to closely screen size the gravel and recover the heavy mineral by hand jigging of each class down to 20 or 30 mesh, with all the finer sizes of the sample to be then treated in a Humphrey Spiral to insure recovery of all the fine heavies.

EXPLANATION:

The reason for this request is that in recent field work of a similar nature it was proven to me clearly that panning lost an important and economic portion of the fine heavies and we know that more precise work must be done to get the correct answer.

* * * * * * * * * * * *

The immediately following paragraph refers to treatment of pit samples. Please expand our right here to stage-wash these samples from top to bottom of pit to allow us to determine the horizon where economic values start - also procurement problem and time element dictates use of unsuitable equipment. We wish the right to run jig tailings to a 14-mesh screen and all the minus 14 to be treated in a Humphrey Spiral.

EXPLANATION:

Aside from the gold recovery, the accompanying values of minera would be lost in greater part by jigging them as a mixture of "3/8 to zero". The strokes required to activate the larger sizes will also pump fines out of the jig into the tails, hence the request to screen the tails for further treatment of -14 mesh material, assuming the +14 mesh jig tails is satisfactorily cleaned of value.

The use of a Humphrey Spiral in either case will insure that al heavies are recovered from the samples and will not interfere with the splittin of the final results. It is proposed that a closed circuit laboratory Humphre Spiral will be used.

Yours truly,

R. W. Michael

R. W. Michael
Consulting Engineer
66 Park Avenue
New York 16, N. Y.

8/10/53 gla

WASHINGTON, D.C.
605-A - 4000 Cathedral Ave. N.W.

Bureau Minerals Administration
RECEIVED
AUG 10 1953

August 8, 1953

Mr. A. B. Needham, Chief
Region 5 Field Team
DMRA - Dept. of Interior
Minneapolis, Minn.

DMA-654X

Dear Mr. Needham:

Enclosed please find background of Mr. Gerald Gilmore, mining engineer, Please approve him as Keenan Properties project engineer.

After carefully combing the field for engineers who have the proper placer experience and background for Keenan Properties Phase 2, I have devised this plan:

Mr. Robert W. Michael, previously approved by your office, is an engineer of considerable importance in the mining world and quite expensive. Although he cannot devote all his time in South Dakota, he is tremendously interested in Keenan Properties' problems, and while he is working out an SEC project on South American placers in New York City, he can take on Phase 2 if we arrange to have Mr. Gerald Gilmore all of the time on the property, under Mr. Michael's supervision. Mr. Michael would be on the property for all major directives and Mr. Gerald Gilmore would carry out his orders. There will be no additional fees in running the project in this way, and it would be a great deal of help to me. Mr. Michael would contract to pay Mr. Gilmore. Mr. Michael has studied our project for three months in New York, and I feel his joining us would be a tremendous contribution towards success.

Yours very truly,

Peggy Keenan

Peggy Keenan

PK/den

cc: Mr. Ernest Ellis

Mr. Gerald M. Gilmore, 66 Park Avenue, New York City

Member of the American Institute of Mining Engineers.

History:

	University of California.
1938	Worked in Garden Canyon, Herefore, Arizona and also his own property.
1941	He was at Old Mexico sampling copper.
1942 - 1944	In Dutch Guiana dredging for Construction Aggregates Co., a subsidiary of Aluminum Co. of America.
1946 - 1947	In Venezuela, under Mr. Robert W. Michael, in charge of a field party doing diamond placer exploration work.

August 6th, 1953

Miss Peggy Keenan
605-A 4000 Cathedral
Washington, D.C.

Dear Miss Keenan:

I have studied with great interest the data you sent me, which specified the conditions and manner in which the Bear Creek area is to be developed to determine the contained, Tin, Tantalum, Columbium, Tungsten, Gold and other minerals.

The specified method of a grid of churn drill holes, with a larger test pit on each line is standard practice, and I am full accord with it. The churn drill holes will give an adequate idea of the total volume of gravel, and the larger pits on each line will expose the physical characteristics of the gravel deposit, which data is useful in determining the type of digging equipment best suited to the job of excavating.

TREATMENT OF THE DRILL HOLE SAMPLES

For minerals other than Gold, many years of field experience have taught me that hand panning of the churn drill samples is entirely inadequate to establish the true mineral content of a gravel. We know that all of the above mentioned minerals can occur in extremely fine sizes, and if your are spending anybodys money it is your duty to get the right answer. Therefore the methods of sample washing must be brought up to modern standards and be designed to recover the total existing fine mineral grains.

The specification that the drilling contractor shall hand pan your samples from his churn drill hole will definitely defeat the purpose of your investigation, and it should be changed to permit modern methods.

The sample from a 20 feet drill hole, six inches in diameter, will not exceed 4 cubic feet. To be exact it is 3.926 cu. Ft. This implies a sample factor of 6.877 to reduce the results to 1 cubic yard. This volume and sample factor will vary with each different depth of hole and must be computed in each case. A steel gasoline drum will contain about 7 cubic feet, and I suggest that the "bailings" from each drill hole be discharged into such a container. The contractor's responsibility can be ended at that point, or he can agree to supply the labor for the reduction of the sample, but this reduction of the sample must be directly supervised by a responsible engineer acting for the owners.

WHAT TO DO WITH THE SAMPLE

We have two objectives in thei sample breakdown. (1) We must determine the exact value of the ground (2) We want the particle size, volume, & weight of each class of gravel, and likewise of the heavy mineral recovered from each size class. With such data in hand, you are then in a position to define a process, and definitely know the required capacities of the different types of equipment with which to effect the process.

The sample should first be put through a nest of screens, as follows:

1/2 Inch

1/2 inch
6 Mesh
10 Mesh
14 mesh
20 Mesh
30 Mesh

You should require the volume and dry weight of the gravel in each of the above sizes, and also the volume and dry weight of the mineral recovered in each class. The mineral in all of the above classes can easily be recovered by hand jigging each class separately. This cab be a 10" x 12" jig operated in a wash tub, or if more practical say a a joplin type of jig 16" x 24" operated with a rocker arm in a wooden batch, or water box. It is simply a wooden frame 3 inches deep fitted with a 30 mesh bottom screen. Under neath the screen- put at least two cross support 1.5 inches wide to act as"cut-water" and put a rim of same width on the ends and sides. In due time I will make a sketch of this for you.

All material below 30 mesh should be dried weighed and placed in stount canvas bags to be shipped to a laboratory along with the mineral of the plus sizes of the same hole, but in a separate parcel from these fines. The laboratory should be equipped with a small induction magnetic separator and a small air table. By this means all of the fine go,d can be segregated & weighed separately, and all of the quartz sand can be eliminated from the fine. At this point all of the heavy mineral fro the hole should be throughly mixed and cut. one half for the weener for assaying, and the toehr for the Government Control. for the record.

TREATMENT OF THE TEST PIT SAMPLES

The proposal to put this through a trommel having 3/8" hole to be fllowed by jigging & Wilfley table is not well designed to save the "fines" In the first place jigging (except for gold) cannot successfully be accomplished on a mixture containing particles ranging from 3/8" to infinity. Any stroke set to work effectively on the larger particles , is bound to pump fines out of the jig and into the tailings. And such losses can be considerable. If you are compelled to use such equipment take due care to have the tailings discharged onto a 14 mesh screen, and save all the undersize and water in steel containers for further reduction, same as the drill hole samples.

In the case of the pit samples, it would be wise to stage wash the material as it is dug to learn the exact horizon at which the mineralization becomes economic. From photographs I have seen there does not seem to be any demarcation defined between overburden & pay gravel. I am familiar with alluvial deposits of these minerals which carry values from top to bottom. This horizon of economic value is important to establish , if it exists, since it will control your eventual exploitable volume.

CONCLUSION

Unless such modifications can be permitted, I feel that the outcome of your project is bound to end in a large question mark. I would hesitate to spend the money, unless modern methods can be used.

Yours very truly

R W Michael

R. W. Michael
66 Park Avenue- New York 16,

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON, D.C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

Defense Minerals Administration
RECEIVED
AUG 3 1953

July 31, 1953

Miss Peggy Keenan
Keenan Properties
605A 4000 Cathedral Ave. N. W.
Washington, D. C.

Dear Miss Keenan:

Either of the two applicants whose experience records you sent with your letter of July 28, 1953 are acceptable, namely, R. W. Michael or Christian Anderson.

As requested by you, a copy of Mr. Michael's record is being sent to Mr. Ellis and a copy is herewith attached for you.

Please let us know when you plan to start the project. If we can be of any further pre-project assistance, please feel free to call on us.

Very truly yours,

A. B. Needham
Executive Officer, Field Team
Region V

Encs.

cc: Ernest Wm. Ellis
Acting Chief, Rare & Misc. Metals Div.

Copy

7/30/53 gla

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
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JUL 30 1953

KEENAN PROPERTIES

SPEARFISH, SOUTH DAKOTA

TIN
COLUMBIUM-TANTALUM
TUNGSTEN
GOLD

TELEPHONE
SPEARFISH 2F14

Washington DC
605 A 4000 Cathedral Ave NW
July 28 1953

Mr. A. B. Needham,
Executive Officer, DMEA Field Team
DMEA
Department of Interior
Minneapolis Minn.

Dear Mr. Needham:

Please find enclosed outline of background of Mr. Robert W. Michael and outline of background of Mr. Christian Skjold Anderson, mining engineers of important experience.

Kiddly approved these engineers for Keenan Properties' Phase 2 Superintendent Engineer position. We will advise which engineer is available at time of opening of the Phase 2 project.

Yours very truly
Peggy Keenan
d b a
Keenan Properties

Sent from New York.

U.S. Defense Atomic Energy Administration
RECEIVED
JUL 30 1953

MR. ROBERT W. MICHAEL
MINING ENGINEER
66 PARK AVENUE
NEW YORK, N. Y.

Outline of background:

1920 - 1941	Compagnie des Diamantes de L'Angola in Portuguese West - Chief of research, Improvement, Equipment. Moved 10 million cubic yards alluvial deposit for diamond recovery. His recovered values were never less than 105% of his projected values.
1942 - 1943	Anton Smit & Co. in Venezuela - Sampling project which proved successful operation of diamond alluvial deposit.
1946 - 1947	Covedia Co. in Venezuela - Developed diamond alluvial deposit.
1952 - 1953	Morabisi Mining Co. in British Guiana - Developed alluvial deposit and set up recovery program and equipment for recovery of columbium-tantalum from stream gravel deposits

Reference: L. J. Parkinson, Professor of Mines
Colorado School of Mines
Golden, Colorado

Report received from [redacted] on: 7/29/53

CHRISTIAN SKJOLD ANDERSON

Age: 58 - 60

Born: Copenhagen, Denmark (of very good family). Became citizen of United States and is residing at present in South Stratford, Vermont.

Education: Went to various schools in Denmark from 1893 - 1904. Main courses: mining engineering.
Interests are copper, gold, sulphur, lead, zinc and about 5 or 6 others.

Countries where he has been and was employed for more than 2 -4 years are:

1913 - 1916 Alaska, in charge of construction and maintenance at the Willow Creek Mine, Wasilla, Alaska.

1917 - 1918 U. S. Army - Sergeant.

1919 - 1922 Returned to Alaska as superintendant, maintenance and mill man for the same Willow Creek Mine in Wasilla. From there was sent to the Astecs Gold Mining Co. in New Mexico then on to British Columbia. There he was under Mr. A. C. Brinker who lives in New York at 140-50 Ashe Avenue, Flushing, L. I. Tel. Flushing 3-3671. Mr. Brinker will give references.

1927 San Francisco.

1928 Arlington Gold Mining Co. in Colorado.

1929 - 1930 Superintendent of National Copper Corp., South Stratford, Vt.

Articles which he has published appeared in the Engineering Mining Journal, March 9, 1931, Mining & Metallurgy, about the Vermont copper district.

1931 Mining engineer, ore dressing engineer and manager of the Altoona Gold Mines, Cartersville, Ga.

1932 California.

1933 New Mexico.

1934 Mill superintendent at the Rapidon Gold Corp., Fredericksburg, Va.

1935 - 1936 Yamba, West Australia. From there he went to Japan then on to Korea, with Nurupi Kozan Kabushiki Kaisha, Taiyudo, Chosen (Japan-Korea).

1937 Returned to San Francisco then went to

1938 Canyon Mines Corp. in California, engaged in experimental work and preparation of plants for mills to treat old mine dumps in Colorado.

JUN 30 1983

1939-1944 Went with Empresa Minera Tanapaca, La Paz, Bolivia, from there to

1945 Peru then to

1948 New York with the Honduras Mining Co. as mining engineer, stayed there until the beginning of

1950 and from then on doing consulting work.

Countries covered: Japan, Korea, Colombia, Haiti, Venezuela, Bolivia then returned to State of Washington, and also Alaska.

Member of good standing with A.I.M.E. since December 1931.

COPY

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

June 15, 1953

Memorandum

To: Mr. Knouse, Rare & Misc. Metals Division

From: Grace L. Ault, Rare & Misc. Metals Division

Subject: Docket No. DMA-654X
Contract No. Idm.-E58
Keenan Properties

Mr. Knouse reviewed Amendment No. 5, dated May 26, 1953, to the above contract, and approved it. Thereafter, he referred the Division copy of the amendment to the Legal Division for review.

Mr. Kane and Mr. Rubin initiated our copy of the amendment on June 12 and returned it to us. Therefore, I am sending this memo to your merely to clear your records--for it is apparent that the routine review has been completed.

Grace L. Ault

Grace L. Ault

Docket Copy

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 8 1953

June 5, 1953

Memorandum

To: Operating Committee, Defense Minerals Exploration Administration, Interior Building, Washington 25, D. C.

From: Executive Officer, Field Team, Region V

Subject: Docket DMEA-654x, Contract Idm E-58, Keenan Properties

Here are the original and two copies of Amendment No. 5 which extends the completion date of the subject project.

This was necessary because of the delay in getting started because of snow this past winter and early spring.

One copy has been transmitted to the Regional Fiscal Section, and copies have been retained by the Operator, the Rapid City office, and this office.

A. B. Needham
Executive Officer, Field Team
Region V

Attachments -3

RECEIVED
JUL -8 1953
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

cc 6-4

Robin
Oxtane

AMENDMENT NO. 5

Docket DMEA 654x, Contract Idm E-58, dated July 16, 1951, between the United States of America and Keenan Properties is amended to read as follows:

1. Completion date of phase 2 is extended to October 15, 1953.

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate total, or the percentage of costs which the Government may pay under the provisions of Article 13 of contract form.

Dated: May 26, 1953

UNITED STATES OF AMERICA

By: A. B. Needham
A. B. Needham, Executive Officer
Field Team, Region V

PEGGY KEENAN d/b/a KEENAN PROPERTIES

By: Peggy Keenan

DMA-654X
Idm-E58

For Keenan Properties

R.M. Atwater, Jr.
Mining Engineer.

Born Millville, N.J.

Education: William Penn Charter School, Philadelphia; Roxbury Latin School, Boston; Royal School of Engineering, Charlottenburg, Berlin, Germany, Mining and Metallurgy Degree.

Early Employment: Inspection and sampling of gold mines in Hungary and France; potash mines in Stratford; copper mines in Mansfeld, Germany; quicksilver mines in Spain and Italy; Sulphur in Sicily; copper and placer gold in Spain for the Exploration Co. Ltd., (Mining Division of the Rothschild Group).

1903. to 1913 Succeeded Herbert Hoover as Engineer of Beswick Moreing Co., in Western Australia and Malaya. Explored many properties for the same company in South Australia, New South Wales, Queensland, tin and copper mines in Tasmania, placer gold mines in New Zealand. Investigated the tin industry in Malaya, Burma and Banka, including the smelting plants at Pulo Brani.

General Manager TNKR Gold Mines, Nelson, British Columbia. Consultant to Anaconda Copper Co. properties later known as North Butte Mining Co. (Cole-Ryan Group.) Field Engineer for Cole-Ryan Group, investigating properties in U.S.A. Canada and Mexico, Arizona and Nevada.

Department of the Interior
Defense Minerals Administration
RECEIVED
MAY 26 1953

Ten months in Bolivia for a group (National City Bank, Speyer & Co., W.R.Grace & Co., American Metal Co.,) appraising Bolivia's mineral resources for a proposed railway system. Included in this trip, an inspection of Cerro de Pasco in Peru, later assisted Mr. Eugene Meyer in the financing of Chile Copper.

Consultant to Anaconda Copper Co., to inspect copper prospects in Valdez, Alaska. Consultant to United States Steel Corporation, to inspect magnetic iron ore occurrences on Texada Island near Vancouver B.C. Became Superintendent Engineer, Butte & Superior Copper Co., developed enormous zinc deposits, a highly successful project. Introduced selective flotation which I had learned in Australia. Introduced the Isherwood Process, later used by Anaconda.

1913 to 1939 Consultant to Ladenburg, Thalmann & Co., 25 Broad St. New York. Became President of North Butte Mining Co. Managing Director of Seneca Copper Co. Consulting engineer for United Verde Extension Co. Vice President of Associated Metals & Minerals Corp.,(branch of Lissauer & Co.) Consultant to Thos. A. Lamont Interests.

1939 to 1952 Managed Columbia Exploration Co. operating gold placers in California and British Columbia. Investigated Mexican tin deposits for 18 months (Engineering & Mining Journal January 1948).

1953. Investigated Monazite Mining Corporation, N.C. mining properties, testing and investigating magnetic and electrostatic separation of concentrates containing columbite, tantalite, gold, rutile, ilmenite, garnet etcetera - an extremely important new development in mining.

Copy to Ernest Ellis
Wm C Broadgate

A. B. Needham

C
O
P
Y

C
O
P
Y

1320 N Street,
Sacramento,
California.

Miss Peggy Keenan
605A The Westchester,
4000 Cathedral Ave., N.W.
Washington, D.C.

May 7th, 1953.

Defense Minerals Administration
RECEIVED
MAY 25 1953

Dear Miss Keenan:

As requested in your letter of April 27th, I prepared an outline of my mining experiences for you. It is attached.

Probably I will be available during the next ninety to one hundred and twenty days to work on the Keenan Properties but I cannot say for sure. I have received several offers recently, none of which appeal to me. Naturally, if I find something attractive I will accept it. However, if you should employ me, I will stay with the job until it is completed.

Commencing June 1st, my address will be General Delivery, Al Tahoe, California.

Yours very truly,

S/ W.H. Watters

B.S. Degree in Mining Engineering, O.S.C., Corvallis, Oregon, 1916.

Employed by Bunker Hill & Sullivan, Kellogg, Idaho, approximately two years as mucker underground, Chainman and surveyor on smelter construction and as lead refinery foreman.

Assayer for Fedderstone & Taft of Wallace, Idaho, 6 months.

Served 18 months in the 27th Mining Engineer Regiment, part of the time in France and England.

Joined the Yukon Gold Co., now the Pacific Tin Consolidated, in the Malay States June 1920 as Junior Engineer. Remained there continuously for four years supervising the drilling of alluvial deposits for tin, surveying dredging properties and becoming Supt. of their Kampar dredging operations when these operations were commenced.

Occupied the next 2½ years on various jobs, including engineering office work in San Francisco and as an engineer in Bolivia with Pope Yateman and Edwin S. Berry, consulting engineers of New York, on the examination of the Patino Mine.

Rejoined the Yukon Gold Co. early in 1927 and remained with them until the latter part of 1931. Was Asst.Mgr. at the time of leaving.

Intermittently during the next five years, was self-employed and supervised a number of gold placer drilling campaigns in Calif., Oregon, Idaho and Montana for O.B. Perry and Irving Bonbright.

Employed by Mr. Guy M. Standifer in Calif. and Nevada from early 1937 to 1948 as Gen. Dredge Dupt. of two bucket-line dredges and one 14 cu.yd. dragline-washing plant. Also, we conducted several prospecting campaigns, churn drilling and shafting for placer gold and diamond drilling for lead, zinc and tungsten.

Joined the Pato Consolidated Gold Dredging Co. in March 1948 and managed their six-dredge operation in Pato Colombia until September 1952.

Age 62.

5/6/53

(May 20, 1953)

W. H. Walters 1320 N. St.

Sacramento

Pacific Cons. in Columbia

R. M. Atwater, Jr. → Mining Eng.

Pres. 1 Wall St. N.Y.

Note! If Dick Atwater gets job tell him F. Sommer Schmidt put in a good word for him.

A. B. Needham

Filmore 3612

Ext. ~~FE~~ 0 287

Minneapolis Minn.

* Walter Lewis 298 (Ext)

---

* Told Lewis to expect a letter from Miss Keenan (my secretary) on the two men above. Both seem to be acceptable but Atwater is getting old. However he would take his son along to do the leg work. Lewis did not believe we could write a Sect. of Disc. until Phase 2 was completed.

F.W.E.

5/4/53 gla

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 1 1953

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

April 29, 1953

Memorandum

To: Operating Committee, Defense Minerals Exploration Administration, Interior Building, Washington 25, D. C.
Attention: E. W. Ellis

From: Executive Officer, Field Team, Region V

Subject: Docket DMEA-654X, Contract Idm E-58, Keenan Properties

Reference is made to previous correspondence concerning the qualifications and selection of a supervisor for the subject project when and if it is initiated into the second phase by the operator, particularly your letter of December 4, 1952 to Miss Keenan, my letter of December 9, 1952 (copy of which was sent to you), Miss Keenan's letter to me dated about February 16, 1953 (copy of which was sent to you), and our letter to the Operating Committee dated March 16, 1953, enclosing a letter from our field representative and referring the disagreement over a supervisor to your office. To date we have had no answer.

The field office and this office is still not satisfied with the operator's selection of Mr. Amundson astheir supervisor, and since no other nominee has been offered and since the contract provides that the supervisor has to be approved by the Government, it appears the matter must of necessity be referred to your office for reconciliation.

We have a letter from Miss Keenan under date of April 25, 1953 inquiring about the matter, and we would appreciate your decision as soon as possible.

A. B. Needham

A. B. Needham
Executive Officer, Field Team
Region V

MF-500

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

REFERENCE SLIP

DATE 5-4-53

REFERRED TO:

1. Code 720 - Rm. 4640
2. Mrs. Ellis
3.
4.

DMA-654X
IDM-E58

FOR:

..... Action	..... Recommendation
..... Approval	..... Record of .....
..... Comment	..... Referring to .....
..... Conference	..... Reply for signature of .....
..... Consideration	..... Rewriting
..... Filing	..... Signature
..... Instructions	..... Suggestions
..... Investigation	..... Your information
..... Initials	
..... Mailing	
..... Previous correspondence	

REMARKS: .....

Check (X) before the items needing attention.

R. E. ADAMS (RA)
Initials of sender.

GPO 16—63815-1

605A The Westchester,
4000 Cathedral Avenue N.W.
Washington, D.C.

27th. April 1953.

Mr. W.H. Watters,
1320 N. Street,
Sacramento,
Calif.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 30 1953

Dear Mr. Watters:

Your letter of April 1, 1953 has been received. We have submitted your proposal to the proper Government agencies for consideration as Engineer-Supervisor of our Phase 2 exploration project.

Are you available for the next 90 - 120 days, to work on Keenan Properties' project? Please send a more detailed outline of your interesting background, including age.

We thank you for your courtesy and will keep you advised of the Government's decision.

Yours very truly,

Peggy Keenan
d/b/a Keenan Properties.

605A The Westchester,
4000 Cathedral Ave., N.W.
Washington, D.C.

27th, April, 1953.

Mr. A.D. Hughes,
One Montgomery Street,
SanFrancisco 4.
California.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 30 1953

Dear Sir:

Thank you for your letters of March 20, and April 6, 1953.

We have sent out to Mr. W.H. Watters a letter in answer to his proposal to us.

Thanking you for your courtesy,

Yours very truly,

Peggy Keenan,
d/b/a Keenan Properties.

605A The Westchester,
4000 Cathedral Avenue N.W.
Washington, D.C.

April 27th, 1953.

The Dean, Colorado School of Mines,
Golden,
Colorado.

Dear Sir:

We are in search of a placer mining Engineer-Superintendent for our exploration project in the very near future.

In 1951, we secured a DMEA loan for the exploration of our stream gravel deposits in Lawrence County, So.Dakota. We finished the first part, or Phase 1 area in 1952. The second part to be explored, or Phase 2, is scheduled to be finished July 1, 1953, and we are allowed 100 days to conclude our work.(The July 1st date may be extended) The 100 days would include the engineering reports, maps, surveys and time. The DMEA specifies that our exploration work be done by churn drilling, panning and test-pit. The test-pit gravel is to be checked through a small placer-washing plant, and the concentrates assayed for tin, columbium-tantalum, tungsten and gold.

The DMEA specifies that we are to choose an engineer-superintendent for the work, who is also acceptable to the Government, and who can be present at all times on the property during the Phase 2 work.

Would you please check your files for available experienced men who qualify for placer exploration work, and who have handled the above named rare metals?

In the event you find suitable applicants, would you request that their application and experience background be sent to us?

Yours very truly,

Peggy Keenan.

605A The Westchester,
4000 Cathedral Ave., N.W.
Washington, D.C.

27 April 1953.

Mr. O.T. McShane,
505 Twentieth Ave.,
San Francisco,
Calif.

Dear Mr. McShane:

Mr. Louis J. Joubert has advised that you are a placer mining engineer of considerable placer experience, and that you might have available time in the near future for a project such as ours.

In 1951 we secured a DMEA loan for the exploration project of our stream gravel deposits in Lawrence County, So.Dakota. We finished the first part, or Phase 1 area, in 1952. The second part to be explored, or Phase 2, is scheduled to be finished July 1, 1953, and an extension may be granted. We are allowed 100 days to conclude our work. The 100 days would include the engineering reports, maps, surveys and time. The DMEA specifies that our exploration work be done by churn drilling, panning and test-pit. The test-pit gravel is to be checked through a small placer-washing plant, and the concentrates assayed for tin, columbium-tantalum, tungsten and gold.

The DMEA specifies that we are to choose an engineer-superintendent for the work, who is also acceptable to the Government, and who can be present at all times on the property during the Phase 2 work.

Would you be interested and available, and if so, what would your fee be as Engineer- Spperintendent?

In the event of your interest, could you send us a personal sheet of your background experience, referring to the projects you have engineered and managed?

Yours very truly,

Peggy Keenan,
d/b/a Keenan Properties

Peggy [redacted] EM-3-0348

1. Did she write McShane as suggested in Jousert's letter of April, 1.

2. Contact the Colorado School of Mines at Golden, Colo.

3. Advertise in a prominent western mining paper.

4. Contact the Yuba Mfg. Co.
Room 706
351 California st.
San Francisco 4, Cal.

605A The Westchester,
4000 Cathedral Ave., N.W.
Washington, D.C.

April 25th, 1953.

Mr. A.B. Needham,
Executive Officer, DM&A Field Team,
Defense Minerals Exploration Administration,
Department of the Interior,
Minneapolis, Min.

Dear Mr. Needham:

May I call attention to my answer to your letters of July 1, 1952, and February 16, 1953?

I have so far received no answer to this communication, which was sent to you with 4 enclosures, and I should appreciate having your reply together with my copy of the Amendment No.4.

Yours very truly,

Peggy Keenan

Peggy Keenan
d/b/a Keenan Properties.

cc/Mr.C.O.Mittendorf
Mr. Ernest Ellis,
Mr. Wm.C. Broadgate,
Mr. Charles Gardner,
Mr.Earl R. Amundson.

Copy

Apr. 20. 4/21/53

Dear Cap Ellis:

Snow has not melted yet, but soon.

No word from Needham on extension request, or Amundson.

Enclosed copies of some engineer answers —

Am enroute to New York

See you soon

Jaggy K.

PERRY & SCHROEDER MINING CO.
26 WEST SIXTH AVENUE
HELENA, MONTANA

April 13, 1953

Department of the Interior
Defense Minerals Administration
RECEIVED
APR 20 1953

Miss Peggy Keenan
Keenan Properties
605A The Westchester
4000 Cathedral Ave., N. W.
Washington, D. C.

Dear Miss Keenan:

Your letter of March 14 has been received. I must apologize for not answering sooner, but I was out of town.

I still am afraid there is no way in which I can be of help to you, in that our own project will apparently require all of my time.

Again, I wish to apologize for not being able to give you a more prompt reply.

Yours very truly

O. H. Perry

ohp/egb

MF-500

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

REFERENCE SLIP

DATE 4-20-53

REFERRED TO:

1. Lab 700 - Rm 4640
2. Mr. Ellis
3. Div. Contract file
4.

DMA-654X
IDM-E58

FOR:

..... Action	..... Recommendation
..... Approval	..... Record of .....
..... Comment	
..... Conference	..... Referring to .....
..... Consideration	
..... Filing	..... Reply for signature of .....
..... Instructions	
..... Investigation	..... Rewriting
..... Initials	..... Signature
..... Mailing	..... Suggestions
..... Previous correspondence	..... Your information

REMARKS: .....

Check (X) before the items needing attention.

R. E. ADAMS (RE)
Initials of sender.

GPO 16—63815-1

LOUIS J. JOUBERT
Placer Mining Engineer
445 Cornell Avenue
San Mateo, California

April 1, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 20 1953

Keenan Properties.
605A, The Westchester.
4000 Cathedral Ave. N.W.
Washington, D.C.

Attention Peggy Keenan:

Dear Madam:-

Thanks for your letter of March 20th relating to your properties in South Dakota.

I regret that I am not available for this examination but would recommend Mr. O.T. McShane, 505 - 20th Avenue - San Francisco.

Very truly yours

(Signed) Louis J. Joubert

C O P Y

Arthur D. Hughes
One Montgomery Street
San Francisco. Calif.

March 27th, 1953.

Peggy Keenan,
605A, The Westchester,
4000 Cathedral Avenue, N.W.
Washington, D.C.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 3 1953

Dear Madam:

I have your letter of March 20, regarding your project in Lawrence County, South Dakota, and wish to thank you for considering me as a possibility for engineering-superintendent.

Since giving up the active management of a tin dredging operation in Malaya, in 1948, I have been engaged in consulting work, usually on a short time basis. Owing to other committments I will not be available to undertake your project on a full time basis, as required by the D.M.E.A.

It is possible that I might be available as a consultant at a later date, to review the work which had been done, in case such a prodedure should prove to be desirable. I would think this might be necessary, only if you are unable to secure the services of a thoroughly competant engineer to supervise the work on a full time basis.

Should it be necessary for you to consider the above procedure, I am enclosing a summary of my professional record covering a period of 45 years, all in connection with placer work. My fees for work of this nature are $100 per day and expenses.

Your project sounds like an interesting one, especially the possibility of producing some of the rare minerals.

Yours very truly,

signed. A. D. Hughes.

3/24/53 gla

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
MINNEAPOLIS

MAR 23 1953

605A, The Westchester,
4000 Cathedral Avenue, N.W.
Washington, D.C.

March 20th. 1953.

Mr. A.B. Needham,
Executice Officer, DMEA Field Team,
Defense Minerals Exploration Administration,
Department of the Interior,
Minneapolis, Min.

Dear Mr. Needham:

Referring to Amendment 4 and the date of July 1, 1953, as completion date, please be advised that Keenan Properties' caretaker has reported the snow in our area as "waist deep" Therefore, we request that the completion date be set ahead because of weather conditions.

We are still waiting for an answer to our letter regarding approval of Mr. Earl R. Amundson as Supervisor - Engineer of the Phase II project.

Yours very truly,

Peggy Keenan.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 23 1953

605A, The Westchester,
4000 Cathedral Ave., N.W.,
Washington, D.C.

March 20, 1953.

Mr. A.D. Hughes,
Room 604, No.1 Montgomery St.,
San Francisco 4,
California.

Dear Mr. Hughes:

We are advised that you are a mining engineer of considerable placer experience, and that you might have available time in the near future for a project such as ours.

In 1951, we secured a DMEA loan for the exploration project of our stream gravel deposits in Lawrence County, So. Dakota. We finished the first part, or Phase I area in 1952. The second part to be explored, or Phase II, is scheduled to be finished July 1, 1953, and we are allowed 100 days to conclude our work. The 100 days would include the engineering reports, maps, surveys and time. The DMEA specifies that our exploration work be done by churn drilling, panning and test-pit. The test-pit gravel is to be checked through a small placer-washing plant, and the concentrates assayed for tin, columbium-tantalum, tungsten and gold.

The DMEA specifies that we are to choose an engineer-superintendent for the work who is also acceptable to the Government, and who can be present at all times on the property during the Phase II work.

Would you be interested and available, and if so, what would your fee be as Engineer-Superintendent?

In the event of your interest, could you send us a personal sheet of your background experience, referring to the projects you have engineered and managed?

Yours very truly,

Peggy Keenan
d/b/a Keenan Properties.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 23 1953

605A, The Westchester,
4000 Cathedral Avenue, N.W.
Washington, D.C.

March 20th, 1953

Mr. Neil A. Rice,
1319 E. Nevada,
El Paso,
Texas.

Dear Mr. Rice:

We are advised by Mr. George Selfridge, Assistant to the Administrator of DMEA, that you are a mining engineer of some placer experience with tin deposits and that you may have available time, for a project such as ours.

In 1951, we secured a DMEA loan for the exploration project of our stream gravel deposits in Lawrence Co., So. Dakota. We finished the first part, or Phase 1 area in 1952. The second part to be explored, or Phase 2, is scheduled to be finished July 1, 1953, and we are allowed 100 days to conclude our work. The 100 days would include the engineering reports, maps, surveys and time. The DMEA specifies that our exploration work be done by churn-drilling, panning and test-pit. The test-pit gravel is to be checked through a small placer-washing plant, and the concentrates assayed for tin, columbium-tantalum, tungsten and gold.

The DMEA specifies that we are to choose an engineer-superintendent for the work, who is also acceptable to the Government, and who can be present at all times on the property during the Phase 2 work.

Would you be interested and available, and if so, what would your fee be as Engineer-Superintendent?

In the event of your interest, could you send us a personal sheet of your background experience, referring to the projects you have engineered and managed?

Yours very truly,

Peggy Keenan
d/b/a Keenan Properties.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 23 1953

605A, The Westchester,
4000 Cathedral Ave., N.W.
Washington, D.C.

March 20th, 1953.

Mr. Louis J. Joubert,
Consulting Placer Mining Engineer,
445 Cornell Ave.,
San Mateo,
California.

Dear Mr. Joubert:

We are advised that you are a mining engineer of considerable placer experience, and that you might have available time in the near future for a project such as ours.

In 1951, we secured a DMEA loan for the exploration project of our stream gravel deposits in Lawrence Co., So.Dakota. We finished the first part, or Phase 1 area in 1952. The second part, or Phase 2, is scheduled to be finished July 1, 1953, and we are allowed 100 days to conclude our work. The 200 days would include the engineering reports, maps, surveys and time. The DMEA specifies that our exploration work be done by churn drilling, panning and test-pit. The test-pit gravel is to be checked through a small placer-washing plant, and the concentrates assayed for tin, columbium-tantalum, tungsten and gold.

The DMEA specifies that we are to choose an engineer-superintendent for the work, who is acceptable to the Government, and who can be present at all times on the property during the Phase 2 work.

Would you be interested and available, and if so, what would your fee be as Engineer-Superintendent?

In the event of your interest, could you send us a personal sheet of your background experience, referring to the projects you have engineered and managed?

Yours very truly,

Peggy Keenan,
d/b/a Keenan Properties.

MF-500

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

REFERENCE SLIP

DATE 3-19

REFERRED TO:

1. ~~H. Berry 4624~~
2. ~~Frank E. Johnson~~
3. Mr. Ellis, Rm. 4640
4.

FOR:

..... Action	..... Recommendation
..... Approval	..... Record of .....
..... Comment	..... Referring to .....
..... Conference	..... Reply for signature of .....
..... Consideration	..... Rewriting
..... Filing	..... Signature
..... Instructions	..... Suggestions
..... Investigation	..... Your information
..... Initials	
..... Mailing	
..... Previous correspondence	

REMARKS: Do we know of anyone who could qualify?

Check (X) before the items needing attention.

ROBERT E. ADAMS

Initials of sender.

GPO 16—63815-1

Betty Weinstein

3/23/53 gla.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 18 1953

March 16, 1953

Memorandum

To: Operating Committee, Defense Minerals Exploration Administration, Interior Building, Washington 25, D. C.

From: Walter E. Lewis, Acting Chief, Mining Division, Region V

Subject: Supervising Engineer for Keenan Properties
Docket DMEA-654x, Contract Idm E-58

There has been correspondence between Peggy Keenan (d/b/a Keenan Properties) and Mr. A. B. Needham, Executive Officer, Field Team, Region V, concerning the qualifications of Mr. Earl Amundson as supervising engineer for DMEA project docket 654x. Your office has a copy of Mr. Needham's letter of December 9, 1952, which was written to Miss Peggy Keenan concerning the subject. Also, your office should have Miss Keenan's reply, as according to the original letter sent to Mr. Needham, Mr. Mittendorf received a copy.

Attached is a memorandum report concerning the same subject by E. O. Binyon, Bureau of Mines field engineer at Rapid City, S. Dak. Mr. Needham requested that Mr. Binyon review Mr. Amundson's qualifications and to state whether or not he would object to his being in charge when the project is reactivated. Attached is a copy of Mr. Binyon's reply. It states clearly his opinions on the matter.

Mr. Needham is at present on vacation and he is expected back on March 30, 1953. In view of Mr. Needham's absence, the problem of deciding on Mr. Amundson's qualifications is being referred to the Operating Committee.

The Acting Chief of the Mining Division concurs with Mr. Binyon in that there is nothing in Mr. Amundson's "Resume of Mining Experience" that would qualify him as experienced in placer work or as a placer engineer.

Mr. Binyon also gives in his letter, on pages 2 and 3, two alternate courses that the Government can follow. Of the two, the Acting Chief, Mining Division, prefers the second. It is doubtful that joint supervision would work, and the end results may give an opening for adverse criticism of the Government. However, if your decision is to keep Mr. Amundson as supervising engineer, then some kind of arrangement should be made whereby samples are taken under joint supervision and analyzed by a reputable firm.

An early reply regarding your decision on this matter will be appreciated.

Walter E. Lewis

Walter E. Lewis, Acting Chief
Mining Division, Region V, for
A. B. Needham, Executive Officer
Field Team, Region V

Attachments

C O P Y

C O P Y

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
Rapid City Field Office
School of Mines Campus
Rapid City, South Dakota

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 18 1953

March 9, 1953

Memorandum

To: A. B. Needham, Executive Officer, DMEA Field Team, Reg. V

From: E. O. Binyon, Mining Engineer, Rapid City Field Office

Subject: Supervising Engineer for Keenan Properties, Docket No. 654X, Contract Idm E-58

In considering the Keenan Properties matter as a whole, the field team feels that Mr. Amundson should not be accepted as supervisor for Phase II of the project. The reasons for not accepting Mr. Amundson are as follows:

1. His own record shows no experience whatever in either sampling or evaluation of placers.

2. He has, at least in the past, been associated with one of the parties, W. O. Fillmore, who is directly or indirectly interested in the property.

3. Under Phase I the government's representative objected to the methods used by Mr. Amundson in check sampling some of the trenches cut during this phase.

The statement by the Keenan Properties - Miss Keenan adds nothing to Mr. Amundson's record that increases his qualifications for the position.

Hearsay reports are that he did not do as well at the Belle Eldridge as reported. (This of Course brings up the question of what is meant by "as well.") Other reports (hearsay) concerning the Mica operation are also adverse. It seems that even though there were favorable reports concerning either the Belle Eldridge or Mica operations, Mr. Amundson would lack the experience to properly sample and sum up the results of the work proposed under Phase II. Unless additional reliable character and professional references can be obtained, the field team feels that Mr. Amundson should not be accepted for this position.

If DMEA considers it advisable to further investigate Mr. Amundson's qualifications, it is suggested that they contact Mr. H. A. Walker of the Homestake Mining Co., Lead, S. Dak., who was affiliated with the Belle Eldridge after Mr. Amundson and who probably has first hand knowledge of Mr. Amundson's professional work. Also, Mr. Herbert

O. DeBeck of the Bureau of Mines, Norris, Tenn., may be contacted concerning Mr. Amundson's operation of the Mindax Mica property at Custer, S. Dak. (1943 - 1944). The Western Electric Company plant he mentions may also be asked for references. Perhaps the operating committee also could arrange to interview Mr. Amundson and then make its decision.

Have? again?

As DMEA is a separate agency from the Bureau and the U. S. Geological Survey, we feel that this agency should make the inquiries concerning Mr. Amundson's ability in order that the Bureau's and the Geological Survey's relations with the public can be maintained. Also the inquiries should be confidential and not referred to either Keenan Properties or Amundson.

The following is suggested as a possible solution to the problem:

Our understanding of the objective of the Keenan property project is that the results of the work done under Phase I and that to be done under Phase II can be the basis for approval or denial of a request for a D. M. P. A. loan of approximately $600,000.

The loan, we know, has been denied but under the existing conditions that apply to the Keenan matters; the position and action taken by the applicant, and the controversy over the results of Phase I, it may be that regardless of the actual results of Phase II, the applicant may insist that the results warrant a loan or further aid from the government, whether or not Mr. Amundson or someone else supervises the work.

Assuming that the above is correct or nearly so, obviously the work of Phase II must be done in such a manner that there can be no question as to the accuracy of the results. Therefore, it is suggested that the government can choose between one of the two courses of action, as outlined below:

1. If Mr. Amundson, or someone with similar qualifications is accepted, as the supervising engineer, then by amendment to the contract require the applicant to permit joint supervision by a government engineer and their engineer. Also by amendment, the sample from all holes and test pits taken under joint supervision are to be concentrated and analyzed by a reputable firm such as Denver Equipment, Gallagher, etc., which is selected by mutual agreement.

   As the drilling contractor under the contract is to do the concentrating of the samples, the contract would have to be amended to permit only drilling by this contractor, then by reducing the price and applying the balance to pay for the concentration, etc. by a company that is agreed upon.

2. Select only an engineer known to specialize in placer sampling and evaluation, regardless of the fee. The work then could be carried out as outlined in Exhibit A and would not require the full time service of the government engineer. However, to avoid any opportunity for argument over the results, a split of the samples should be handled as outlined above. This, I think, should satisfy all concerned.

The reason for this suggestion is that it is difficult, if not impossible, to arrive at a decision as to the ability of Mr. Amundson or any engineer, with similar qualifications, to carry on the work of the project either from his own record or even by talking to people with whom he has been associated. Obviously, the man selected must be acceptable to the applicant or the past and present difficulties or controversy will continue indefinitely.

You certainly did not ask for all of the above as a reply to your memorandum, but I did not know how else to clarify our (the field team's) position on the matter.

/s/ E. O. Binyon

E. O. Binyon

cc: Reg. Director, Reg. V
Redden
files

654

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 16 1953

605A The Westchester,
4000 Cathedral Ave., N.W.
Washington, D.C.

March 14th. 1953. DMEA 654

Mr. Owen Perry,
Perry & Schroeder Mining Co.,
c/o Hotel Henderson,
Aiken, So.Carolina.

BW

Dear Mr. Perry:

Thank you for your letter of March 6, 1953. Recently, while in New York, a mutual contact with Callahan Lead and Zinc advised that we write to you.

Referring to paragraphs 2,and 3 of your letter, we appreciate your opinion. Keenan Properties did not set up the attached specifications the Government wrote the Amendment to our DMEA project contract, which specifies the work in Phase II. Regarding the recovery of the rare metals of lighter specific gravity, they are harder to recover than gold, but work done previously by panning in our creeks show excellent results. We believe the specifications should include checking and tabulating the gravels at interval depths to establish overburden. The Phase II gravels will average greater depth than in our Phase I area, which was more shallow, and has very little overburden.

Referring to Phase II Amendment attached, under paragraph 2, "General Conditions", we prefer not to disturb the gold in the concentrates, but to send the concentrates direct to the laboratory for assay of tin, columbium-tantalum, tungsten and gold.

Regarding the time element, we are of the opinion that, in the event we do not finish the work by July 1, 1953, an extension may be granted.

Our first letter was an enquiry as to your availability and your fee as Supervisor - Engineer. We would appreciate hearing from you further.

Please return the enclosed photostats when convenient.

Yours very truly,

pk/sf

Peggy Keenan.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

March 9, 1953

MEMORANDUM

To: Hazel Berry
Operating Committee

From: Grace L. Ault
Rare and Misc. Metals Division

Subject: Docket DMEA-654
Contract No. Idm-E58
Amendment No. 4

Mr. Ellis has reviewed Amendment No. 4 dated February 16, 1953, on the above-captioned contract and has approved it.

Grace L. Ault
Grace L. Ault

Posted 3-9-53 (RA)

BL

C O P Y

File

C O P Y

PERRY & SCHROEDER MINING CO.
26 West Sixth Avenue
Helena, Montana

c/o Hotel Henderson
Aiken, South Carolina
March 6, 1953

Miss Peggy Keenan
605A The Westchester
4000 Cathedral Ave., N.W.
Washington, D.C.

DMA-654 X

Dear Miss Keenan:

I have your letter of February 28 and I am curious as to who referred you to me.

My company and some associates are at the present time occupied in a sampling campaign in South Carolina, and this work will surely not be completed by the end of this month, which means that in any case I would not have any time to spare within the 100 day limit which you are allowed before July 1.

If I may venture an opinion, you are planning a job that will require more than one hundred days, if a thorough job of sampling is to be done and the project is of commercial size. I might point out that from our own experience, it is almost impossible to pan the cores from churn drilling for Columbium - tantalum, tungsten, and even for tin. These materials are not readily panned, and we have found it necessary to set up a laboratory where the drill core could be concentrated on a small size Wilfly table. In addition to this, the materials from test pits cannot be concentrated by means of an ordinary placer washing plant, which would be suitable for gold sampling. Again, it would be necessary to use either a Wilfley table or at least jigs.

I am sorry I can't be of more help; and, again I am curious to know how you happened to be referred to me as being in the consulting business.

Yours very truly,

signed/ O.H. Perry

ohp/egb

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 3 1953

605A, The Westchester,
4000 Cathedral Avenue N.W.
Washington, D.C.

28 February, 1953.

BW

Mr. Owen Perry,
Henderson Hotel,
Aiken,
So.Carolina.

Owen 654

Dear Mr. Perry:

We are advised that you are a mining engineer of considerable placer experience, and that you might have available time in the near future for a project such as ours.

In 1951, we secured a DMEA loan for the exploration project of our stream gravel deposits in Lawrence Co., So. Dakota. We finished the first part, or Phase 1 area in 1952. The second part to be explored, or Phase 2, is scheduled to be finished July 1, 1953, and we are allowed 100 days to conclude our work. The 100 days would include the engineering reports, maps, surveys and time. The DMEA specifies that our exploration work be done by churn drilling, panning and test-pit. The test-pit gravel is to be checked through a small placer-washing plant, and the concentrates assayed for tin, columbium - tantalum, tungsten and gold.

The DMEA specifies that we are to choose an engineer - superintendent for the work, who is also acceptable to the Government, and who can be present at all times on the property during the Phase 2 work.

Would you be interested and available, and if so, what would your fee be as Engineer - Superintendent?

In the event of your interest, could you send us a personal sheet of your background experience, referring to the projects you have engineered and managed?

Yours very truly,

Peggy Keenan

Peggy Keenan
d/b/a Keenan Properties.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D. C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 2 1953

February 26, 1953

Memorandum

To: Operating Committee, Defense Minerals Exploration Administration, Interior Building, Washington 25, D. C.

From: Executive Officer, Field Team, Region V

Subject: Amendment No. 4, Docket DMEA-654X, Contract Idm-E58 Keenan Properties, Spearfish, S. Dak.

Here are the original and two copies of the subject amendment extending the completion date of phase 2 to July 1, 1953. The reason for this extention is because the operator is unable, due to snow and wintery conditions, to begin phase 2 operations before March 1, 1953.

A copy of this amendment has been retained by the operator, the Rapid City office, the Regional fiscal section, and this office.

A. B. Needham
Executive Officer, Field Team
Region V

Attachments

Cor 3-2-53

RECEIVED
MAR 18 1953
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

2/25/53 gla

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 24 1953

KEENAN PROPERTIES

SPEARFISH, SOUTH DAKOTA

TIN
COLUMBIUM-TANTALUM
TUNGSTEN
GOLD

TELEPHONE
SPEARFISH 2F14

Washington DC
c/o Wm C. Broadgate
421 Tower Bldg
Feb. 18. 1953

Mr. Ernest Ellis, Chief
Rare and Miscellaneous Metals
Defense Minerals Exploration Administration
Department of Interior
Washington D.C.

Dear Mr. Ellis:

Copies of documents related to Amendment 3 & 4 Phase 2 Contract Idm-258 are herewith enclosed.

I have been anxious to see you. Please call me when you have a moment Emerson 3-0348.

Yours Sincerely
Iggy Keenan

KEENAN PROPERTIES

SPEARFISH, SOUTH DAKOTA

TIN
COLUMBIUM-TANTALUM
TUNGSTEN
GOLD

c/o Wm. C. Broadgate
421 Tower Building
Washington, D. C.

TELEPHONE
SPEARFISH 2F14

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 24 1953

Mr. C. O. Mittendorf
Administrator
Defense Minerals Exploration Administration
Department of Interior
Washington 25, D. C.

Dmea 654

Dear Mr. Mittendorf:

The enclosed copy of our letter to Mr. A. B. Needham, with accompanying documents, are for your records.

During November and December, 1952, I was on Keenan Properties and negotiated the equipment and services of individuals necessary for the completion of Phase 2, Amendment 3, Contract Idm-E58.

Thanking you for your many courtesies,

Yours very truly,

Peggy Keenan

Peggy Keenan
d/b/a/ Keenan Properties

CC: Mr. Ernest Ellis
Mr. Wm. C. Broadgate

c/o Wm. C. Brendgate
421 Tower Building
Washington, D. C.

Mr. A. E. Needham, Executive Officer
Field Team, Region V
Defense Minerals Exploration Administration
Department of the Interior
Minneapolis, Minnesota

Dear Mr. Needham:

Thank you for sending me Amendment No. 4, extending the completion date on my exploration contract Idm-[illegible] to July 1, 1953. As you remark in your letter of February 18, 1953, it has been impossible to start work due to weather conditions.

I have delayed answering your letter of December 9, 1952, regarding the qualifications of Mr. Earl Amundson as supervising engineer for the project until I had the further data, which I enclose herewith.

1. I feel sure that Mr. Amundson's experience as outlined, plus the work he previously has done for Keenan Properties, fully qualifies him as supervising engineer. We are as anxious as the DMEA that we have expert supervision.

2. I have been investigating Mr. Amundson's association with Mr. Filmore and find that Mr. Filmore owes Amundson money for consultation work on the organization of the Spokane Silver and Lead Mine, but that he owns no stock or other interest and is not affiliated with Mr. Filmore. It is absurd to believe that Mr. Amundson would be in any way influenced by such a relationship, or could be in "collusion" with Filmore.

3. I have had no prior notice that Mr. Amundson's sampling methods were thought by the Field Team to be "incompetent." We thought them to be quite the reverse of incompetent and believe Amundson to have done a very careful and thorough job. The way his results checked with previous sampling and with the Johnson "composite" sample indicates this to be true. However, this third point boils down to a matter of opinion and I can only ask that Mr. Mullen outline in some detail his objections to the Amundson sampling procedure so that we can see upon what grounds he bases his objections.

I think the above covers the three points made in your letter. Mr. Amundson is a very competent engineer and is so acknowledged in South Dakota. He is a very busy man and we are fortunate that he is willing to serve at the figure specified in the contract. He is familiar with the area and with recovery methods suitable to the minerals involved. He has a reputation to uphold. Other competent engineers I have contacted want a great deal more money to do the job, and I do not want a third-rate man, and I am sure you do not either.

I trust that you will see fit to approve Mr. Amundson so that we will be prepared to start work when the weather permits.

Sincerely,

Peggy Keenan

Peggy Keenan
d/b/a/ Keenan Properties

Enclosures:
1. 7 copies of Amendment 4.
2. Resume of Mining Experiences - Earl W. Amundson, Black Hills of South Dakota.
3. Copy of Clayton T. McNeil, N. M. letter.
4. Copy of answer to Clayton T. McNeil, N. M.

Copies:
Mr. C. O. Mittenderf
Mr. Ernest Ellis
Mr. Wm. O. Broadgate
Senator Francis Case
Mr. Earl W. Amundson

COPY

COPY

CLAYTON T. McNeil. E.M.
822 Bank of America Building.
300 Montgomery St.
San Francisco, California.

28 January 1953.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 24 1953

Miss Peggy Keenan,
605A The Westchester,
4000 Cathedral Avenue N.W.
Washington, D.C.

Dear Miss Keenan:

In reply to yours of January 10, regarding my supervising the drilling of your placer properties in South Dakota, I could devote approximately one-half my time during the 100 days scheduled for this testing. My Charge would be $100.00 per day plus expenses, this time to include travelling and writing report. I also have available a competent engineer who would remain on the job for the full time and his fee would be $50.00 per day. In other words, our combined charge would be approximately $10,000.00 plus expenses.

I enjoyed our brief visit in Washington and the plane left as scheduled.

Sincerely yours,

Signed. Clayton T. McNeil.

CTMcN:so

Clayton T. McNeil.

605A The Westchester,
4000 Cathedral Ave., N.W.
Washington, D.C.

11 February, 1953.

Mr. Clayton T. McNeil,
822 Bank of America Bldg.,
300 Montgomery St.,
San Francisco,
California.

Dear Mr. McNeil:

Thank you for your letter of January 28th, 1953.

We note your estimated fee for your work for part-time supervision, and the additional fee for a competant engineer for full-time service.

The total amount of money allocated for the Engineer-Supervisor by the United States Government is $50.00/day - 100 days for one full time supervisor and the total fee includes the final report. However, we are forwarding copies of your letter, and copies of this letter to the DMEA offices, and we will advise you further.

It was a pleasure to discuss the matter with you while you were in Washington D.C.

Yours very truly,

PK/jf.

Peggy Keenan.

RESUME OF MINING EXPERIENCES - KARL R. AMUNDSON

BLACK HILLS OF SOUTH DAKOTA

December 2, 1941 - Arrived in Deadwood, South Dakota - Position, General Manager & Chief Engineer, Belle Eldridge Gold Mines. Scope of work - Starting with an empty mill building which had been constructed in the early 1920's, I supervised the design and construction of a 70 ton per day selective flotation plant for treating a complex lead, zinc, gold, silver ore. With the exception of the coarse ore bin and primary crusher, which had been installed at an earlier date, I made a complete installation from crusher to concentrate filter, including the following equipment; ore feeders, ball mill, rake classifier, two banks of six cell each flotation machines, conditioners, reagent feeders, disc filters and concentrate bins. The plant was completely electrified and was operated by push buttons.

The flow sheet was correct from the start of the operation. As a result, the plant operated continuously, twenty four hours per day for many months before it was necessary to shut down for repairs.

I set up an assay office and chemical laboratory at this plant that was quite complete, considering the size of the operation. It contained crushing and grinding machinery, screens, oil fired assay furnace, laboratory type flotation cells, mineral jig, many scales and balances, polarized light microscope, dozens of pieces of laboratory equipment, hundreds of chemicals.

I personally trained an assayer and wet test analyst for this job.

The sulphide lead zinc deposit of the Belle Eldridge Gold Mines had been opened up by several small adits prior to my occupation of the mine. Two attempts on previous occasions had been made to concentrate the values

contained in the ore. Both had failed due to the complex nature of the sulphides. As a result, only a small amount of ore had been mined.

The upper contact (Deadwood Formation) ore was mined by driving drifts into and under the ore body. The Belle Eldridge upper contact ore was deposited in a series of troughs formed in the porphyry intrusives. Diamond drilling indicated that a series of troughs extended to the east of the original adits in an almost parallel north-south direction.

Sufficient ore to insure full time capacity mill operation was mined during the period of my association with the operation. By August 1943 a body of ore sufficient to keep the mill operating for a full year had been blocked out and opened up. In addition one vertical diamond drill hole had penetrated the porphyry cap and had disclosed values in the lower contact Deadwood Formation. Subsequent exploration by others proved the existance of the lower contact ore body.

I claim the following achievements while associated with The Bell Eldridge Gold Mines.

(1) Design and construction and operation of a lead, zinc, gold, silver concentrating plant, wherein optimum recovery of all metals was made.

(2) The opening and mining of the B. E. ore-body wherein sufficient ore of mill grade was mined to adequately furnish mill feed for continuous operation of the plant.

(3) Exploration and development of the ore-body, ahead of mining whereby sufficient ore was blocked out to insure future operation of the benification plant.

(4) Management and engineering ability whereby this project was successful during my tenure of operation. I have a C.P.A. audit to prove this statement.

My connection with the Belle Eldridge Gold Mines was terminated on August 1, 1943. A change in the directorate officers of the company brought in men with little knowledge of mining or mill operation.

The B. E. operation coasted for a year on the ore body I had opened up! The flow sheet I had developed was used during this period. The new officers formulated a plan whereby the concentration of lead and zinc was abandoned and attempts made to recover only gold and silver. Several hundred thousand dollars was spent in building a cyanide plant. This plant was a complete failure. Several months of operation produced only a few ounces of gold. I was asked to return to the B. E. Mines but declined.

September 1943-March 1944 - Windak Mines, Custer, S. Dak.

Owned by John Holten and associates of St. Paul, Minnesota. I was engaged to open up and operate a mica mine under lease by this company. Using portable gasoline powered air compressors, pumps, air drills and hoisting equipment, this mine produced and sold book mica from the first day of operation. I was engaged to train personnel for the operation. On March 1, Holten's associates took over the operation. During my tenure of management the mine was the second largest producer of book mica in the district.

March 1944-January 1945

Engaged as consultant by a Rapid City, South Dakota Syndicate to examine and procure properties. Professional ethics does not permit me to disclose the names of my clients involved in this investigation. As the result of the data submitted, two very successful operations ensued.

1945

Upon request of the War Manpower Commission I took a position with the

Western Electric Company in their northern New Jersey plants. My experience in the field of Electrical Engineering prior to mining qualified me for this work. My assignment with Western Electric was the design of test sets to check radar equipment in the process of manufacture. At wars end the plant was shut down. I was asked to stay on in the telephone department but declined. My family had remained in the west during my stay with Western Electric in the east. Furthermore I preferred the wide open spaces of the west to the conjested turmoil of eastern manufacturing plants.

1946@1951

This period covers a multitude of activities; mine sampling, diamond drilling, churn drilling, construction, acquisition of mining properties, metallurgical testing, flow sheets, compilation of data.

A thousand pages of data was compiled for the Era Mining Company; consisting of hundreds of assays, reports on dozens of churn drill holes, flotation tests, gravity gig tests, amalgamation and cyanidation tests. Yardages of materials were computed, maps were prepared.

The Korean war situation in 1950 and the resulting material controls resulting therefrom deferred the operation of this project. Test data has been completed, operation will be forthcoming if and when economic conditions reach a more staple level than at the present writing.

Earl R. Amundson

Submitted February 10, 1953

1952 - Hot Mining - Work similar however as it deals with construction and volume handling of materials.

The Thermoflector Corporation of North Sioux City, S. Dak. was organized to manufacture lightweight and sand gravel concrete block.

Thermoflector Corporation is a $200,000.00 enterprise, owned by myself and five associates. My position with the company is Vice President and Ch. Engr.

Starting with a vacant tract of land in April 1952, the plant was constructed, equipment installed and production started in October 1952. Large tonnages of materials are handled daily by a system of conveyors. Block production is by automatic machines. Average daily production is 6000 8" x 8" x 16" units. Photos are enclosed of this operation.

I have several patents pending covering the Thermoflector block.

- - - - - - - - - - - - - - - - - -

Earl R. Amundson

12/12/52 gli

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 12 1952

KEENAN PROPERTIES
SPEARFISH, SOUTH DAKOTA

TIN
COLUMBIUM-TANTALUM
TUNGSTEN
GOLD

TELEPHONE
SPEARFISH 2F14

Dec. 10 1952

Mr. Ernest Wm Ellis, Chief
Rare and Misc. Metals Division
DMEA
Washington D.C.

Dear Mr. Ellis:

Your letter of Dec. 4 recieved - regarding procedure on the position of Supervising Engineer on Phase II Docket No DMA-654X Contract No Idm-258.

Enclosed please find a proposal from J.H. Holwell & Sons, Contracting Drillers, Osage Wyoming. You will note the price quoted is $5.00 per ft of churn drilling. I was in Rapid City yesterday, and the same price prevails. Proposals are being sent from Rapid City for our consideration but the Holwell Co has had successful placer drilling experience.

It is cold and rugged up here, lots of snow and ice and a blizzard or so. We will soon have cost data on rentals of small test plant equipment.

Yours Very Sincerely
Peggy Keenan dba Keenan Prop.

J. H. HOLWELL & SONS
CONTRACTING DRILLERS
BOX 115 OSAGE, WYOMING

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 12 1952

December 5, 1952

Mr. Earl R. Amundson
Supervising Engineer
Keenan Properties
Spearfish, S. Dak.

Dear Mr. Amundson:

As per our recent conversations regarding the J. H. Holwell & Sons churn drilling the placer gravels on Keenan Properties we submit the following proposal:

Referring to the work outlined, we will take our dual wheel truck-mounted churn drill rig to Keenan Properties between April 1-15, 1953, and under your supervision will drill 9 6" holes across the stream gravel of an approximate average depth of 20 feet at intervals of 50 feet apart. We will raise the gravel contained in the 6". Each drill hole shall be cased, shall be 6" in diameter and shall be drilled to a depth in the bedrock to where the enriched mineral values are recovered. The material recovered from each drill hole shall be delivered to a panner specified by you. As soon as a churn drill hole has reached an approved depth, we will move our rig to the next location and drill.

As per our various conversations we do not have a cat-mounted drill, nor do we know of one in the South Dakota-Wyoming area. We advise that Keenan Properties should make the following preparation for our rig:

Along the line specified across the creek, and into the area, a catterpillar should prepare a road in the gravel so as to insure moving our rig without difficulty and delay.

Our proposal is $5.00 per foot of churn drilling, which is the total cost including moving our rig to the site of exploration.

You will notify us in writing of an actual starting date 10 days in advance.

This cost on this proposal is based upon the Keenan Properties work as outlined in Belle Fourche, S. Dak, Dec. 5, 1952 and from our experience in drilling the Red placers near Lead under your direction in 1948, 1949.

Yours very truly,
Quinton Holwell
Kink Holwell
J. H. Holwell & Sons
Osage, Wyoming

C
O
P
Y

12/12/52 gla

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

December 9, 1952

noted by EWE 12/12/52 gla

Miss Peggy Keenan
c/o Keenan Properties, Inc.
Spearfish, South Dakota

Dear Miss Keenan:

Reference is made to your Defense Minerals Exploration Contract Idm-E58, Phase 2, and specifically to correspondence with the Washington, D. C., office concerning the probability of employing Earl R. Amundson as general supervisor.

Since the contract provides that your supervising engineer be approved by the Government, your correspondence was referred to our field representatives for their opinion on Mr. Amundson.

We have been advised by our field representatives that, Mr. Amundson cannot be approved, and we would appreciate a resume of his qualifications. Preliminary inquiry has disclosed the probability of Mr. Amundson having had only a limited technical training and that as chemical engineer, therefore not qualified for such supervision; have been associated with W. O. Fillmore, owner of much of the area Keenan Properties, Inc., has under lease; and the party who check sampled after W. W. Johnson completed Phase 1 of the project, to which the Government field representatives objected as to methods. The latter two reasons pose the possibility of controversial collusion and incompetence of sampling procedure.

The above disclosures are not factual, but surmise based on certain knowledge we have without benefit of a resume of his qualifications.

Future contact can be had directly with D. H. Mullen, Supervising Engineer, Rapid City Field Office, Bureau of Mines, or with J. A. Redden, U. S. Geological Survey, Custer, S. Dak., who are the field representatives under which the project will be administered and supervised for the Region V Field Team, or this office, as you wish.

Sincerely yours,

A. B. Needham
Executive Officer
Field Team, Region V

ABNeedham:dg
cc Dutton
Mullen
Redden
DMEA (wash)
Region V
files, df

654
700 FILE COPY
SURNAME:

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

DEC 4 1952

Miss Peggy Keenan
Keenan Properties
Spearfish, South Dakota

Re: Docket No. DMA-654X
Contract No. Idm-858
(Tin, columbium, tantalum, tungsten.)
Peggy Keenan d/b/a Keenan Properties
Lawrence County, South Dakota

Dear Miss Keenan:

This will acknowledge your letter directed to Mr. C. U. Mitterdorf, dated November 26, 1952, with which you enclosed a copy of Mr. Earl R. Amundson's letter accepting the position as Supervising Engineer to direct the exploration program provided for under Amendment No. 3 (Phase II) of the above contract.

The person selected to be the Supervising Engineer requires the approval of our Region V Field Team. I have discussed this matter by telephone today with Mr. A. B. Needham, Executive Officer of our Minneapolis office. He will contact you at the earliest possible time in regard to Mr. Amundson.

Sincerely yours,

SIGNED

Ernest Wm. Ellis, Chief
Rare and Misc. Metals Division

12-4-52

cc to: Mr. W. C. Broadgate
421 Tower Bldg.
Washington 5, D. C.

GLAult/EWEllis/gla
12-3-52
cc to: Adm. Reading File
Docket
Messrs. Renick, Rm. 3061
Kinkel, Rm. 4234 GSA
Ellis
DMEA Field Team, Region V (w/c incoming letters)

12/3/52 gla

KEENAN PROPERTIES, ~~INC.~~

SPEARFISH, SOUTH DAKOTA

Ans

TIN
COLUMBIUM-TANTALUM
TUNGSTEN
GOLD

TELEPHONE
SPEARFISH 2F14

Rapid City, South Dakota,
26th. November, 1952.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
1952

Mr. C.O. Mittendorf,
Administrator,
Defense Minerals Exploration Administration,
Department of the Interior,
Washington, D.C.

Dear Mr. Mittendorf:

With reference to Amendment No.3, Contract Idm - E58, Docket No. DMA - 654X, Keenan Properties has selected Mr. Earl R. Amundson, Engineer, as Supervising Engineer to direct the entire exploration program of the Amendment No.3, Phase 2, work.

We herewith enclose a copy of his letter of acceptance and submit same for your approval for the Government.

Yours very truly,

Peggy Keenan

Peggy Keenan
d/b/a Keenan Properties.

Adress:
c/o Wm.C. Broadgate,
421 Tower Bldg.,
Washington, D.C.

Era Development Corporation

P. O. Box 3

Deadwood, South Dakota

26 November 1952.

To: Peggy Keenan,
d/b/a Keenan Properties,
Spearfish,
South Dakota.

Acceptance of Supervising Engineer Position.

Dear Miss Keenan:

Referring to your request for my services as Supervising Engineer on the work as outlined in the October 28,1952, amendment to Contract Idm - E58, Docket 654X, I herewith accept the position to direct the entire exploration program as outlined in the Phase 2, Exhibit "A".

I will advise you of the response to my requests for bids from a churn-drill contractor or contractors, and I will arrange my affairs so as to be on Keenan Properties to engage a crew and supervise the work, weather permitting.

I will also advise you on the test plant equipment to be used, the costs of freight, rentals and assembly costs.

Yours very truly,

Earl R. Amundson

Earl R. Amundson.

12/3/52 gla

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 2 1952

Era Development Corporation
P. O. Box 3
Deadwood, South Dakota

26 November 1952.

To: Peggy Keenan,
d/b/a Keenan Properties,
Spearfish,
South Dakota.

Acceptance of Supervising Engineer Position.

Dear Miss Keenan:

Referring to your request for my services as Supervising Engineer on the work as outlined in the October 28,1952, amendment to Contract Idm - E58, Docket 654X, I herewith accept the position to direct the entire exploration program as outlined in the Phase 2, Exhibit "A".

I will advise you of the response to my requests for bids from a churn-drill contractor or contractors, and I will arrange my affairs so as to be on Keenan Properties to engage a crew and supervise the work, weather permitting.

I will also advise you on the test plant equipment to be used, the costs of freight, rentals and assembly costs.

Yours very truly,

Earl R Amundson

Earl R. Amundson.

Mr. C. A. Mittenbergf

W. C. BROADGATE

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 2 1952

Dear Mit,

I hope you can approve Amunson for this position. He is the only first class man who knows this area, including the particular mine.

I was amused at noting from my morning mail that I am being urged for Assistant Secretary for Mineral Resources.

Sincerely

Bill

MF-500

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

REFERENCE SLIP

DATE 12-2-52

REFERRED TO:

1. Code 700-Rm. 4640
2. ~~Mr. Ellis~~
3. ~~Mr. Kinney~~
4. Mr. F. E. Johnson
5. ~~Docket file~~

FOR:

..... Action	..... Recommendation
..... Approval	..... Record of .....
..... Comment	..... Referring to .....
..... Conference	..... Reply for signature of .....
..... Consideration	..... Rewriting
..... Filing	..... Signature
..... Instructions	..... Suggestions
..... Investigation	..... Your information
..... Initials	
..... Mailing	
..... Previous correspondence	

REMARKS: Mr. Mittenbergf has not seen this, apparently. Mrs Abell

Check (X) before the items needing attention.

Adams (AA)
Initials of sender.

GPO 16—63815-1

700 FILE COPY
SURNAME:

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

NOV 18 1952

Mr. W. C. Broadgate
421 Tower Building
Washington, D. C.

Re: Docket No. DMA-654X
(Tin, columbium, tantalum, tungsten)
Peggy Keenan d/b/a/ Keenan Properties
Lawrence County, South Dakota

Dear Bill:

Pursuant to your note of November 14, we are returning herewith the blueprint of a washing plant design which you left in our office at the time we discussed matters pertaining to the above-captioned docket.

Sincerely yours,

Signed

S.H.
11-18-52

Ernest Wm. Ellis, Chief
Rare and Misc. Metals Division

Enclosure

GLAult/EWEllis/gla
11-17-52
cc to: Adm. Reading file
Docket
Mr. Ellis

Cap Ellis

W. C. BROADGATE

11/14

421 Tower Bldg
City.

Dear Cap.

When we had the last conference on the Keenan business we left behind a blueprint of a washing plant design. It has no bearing on the present contract.

Would you be good enough to get this from the file and mail it to me on Monday?

Thanx.

Sincerely
Bill Broadgate

11/7/52 gla

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D. C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 6 1952

November 4, 1952

Memorandum

To: Operating Committee, Defense Minerals Exploration Administration, Interior Building, Washington 25, D. C.

From: Executive Officer, Field Team, Region V

Subject: Docket DMEA-654, Contract Idm-E58
Keenan Properties, Inc.

Reference is made to our memorandum of September 19, 1952, transmitting copies of the field team report on the request for exploration under Phase 2.

Several errors were disclosed when this report was edited a second time, and attached are three sets of pages 6, 23, 24, 27, 30, 31, and 35 on which errors were found. Please substitute these pages for corresponding pages in the report as submitted on September 19, 1952, and destroy the old pages.

Also attached is a tabulation of analysis by the operator and the Bureau, as far as they are available, for your information.

We are sorry for the errors necessitating the page substitution. Calculations were checked, but the errors were not noted on the first check and there was no opportunity to further check because of the urgency of getting in the report.

A. B. Needham
Executive Officer
Field Team, Region V

Attachments

ABNeedham:dg
cc Dutton
Mullen
Region V
files
df

To illustrate this point, the following table shows the relative influence of the composite sample to each block.

Block Bear Creek	Yardage	Percent of Total Yardage	Percent of Total Value Represented by Each Block	Percent of Composite Sample Represented by Rejects from Each Block
1	76,615	25.5	12.3	45.0
2	20,972	7.0	9.6	23.1
3	42,314	14.1	20.7	10.3
4	74,693	24.9	38.5	7.0
Potato Creek				
6	32,508	10.8	3.4	4.9
7	8,300	2.8	2.4	4.2
8	44,996	14.9	13.1	5.4

A simple examination of the table shows the possible erroneous results that can be obtained by applying such a composite to the entire deposit.

3. Arithmetical or other errors, if they exist in the Johnson report, have been fully corrected in the attached appendix.

3. (c) The introduction of the factor of weight of gravel is completely redundant. Authorities on weights of material almost universally use 100 pounds as the average weight of 1 cubic foot of gravel. There is not reason to believe that the gravels of the Tinton area vary greatly from the average of gravels in other areas. Furthermore, the weight of the gravel in the bank (2700 pounds per cubic yard) is <u>not</u> used in any of the calculations on individual blocks and has no bearing on calculated yardages or values. The only purpose of using this figure is to determine the ratio of concentration, which in this case is extremely high.

4. This item is also redundant. The recalculated values in the appendix are in terms of metal content in each block and current quotations can be applied.

A dam 50 yards long, 7 yards high, 4 yards wide on top with a front slope 3:1 and back slope 2:1 would contain 7,525 yards of material. At 10 cents a yard, plus a reasonable cost for gates and cement work on the spillway, would mean a $3,250 cost against 214,594 yards of gravel, approximately 1½ cents a yard. Three-inch pipe at $1.00 a foot, a pump, high pressure type, a source of power, and installation would amount to 20¢ per yard. Add 5 cents for an operator and supplies and water would cost 25¢ a yard on a 200-yard per day basis. Portability is essential for an installation designed to treat gravel in a narrow valley. A portable installation to handle gold gravels was used some years ago in Colorado and the cost was said to have been around $30,000. At the present time an installation designed to handle the products in the Bear Creek gravels would cost around $50,000, a charge of about 23¢ a yard. This charge could be reduced were other gravels to be developed, but at present the only ones definitely known are on Bear Creek. Those on Potato Creek are eliminated by the sampling results. We have, then, a charge of 48 cents a yard, which the cost of power installation for the pump would bring up to 50 cents a yard against this body of gravel before the beginning of operations.

Turning now to the cost of operations, it would be possible to make an estimate, based on the number of men necessary, the cost of machinery here, cost of supplies, supervision, and all the many things entering into the operation, but if it costs 25 cents a yard to operate on a large scale, then a small operation would cost as much again per unit and this when operating for gold alone.

We have then a cost of $1.00 per yard against the gravel, the value of which from the calculated average grade is $1.36, including 35 cents

for gold. This would mean a profit of $0.36 per yard were it possible to extract all the values in the same proportion as the gold and for the same cost. While all the gold cannot be recovered, it may be considered as recoverable for all practical purposes of making an estimate. However, such is by no means the case with the other metals. In the Malay states the percentage unrecovered runs from 15 to 20 percent. While this may arise from different causes, yet it is a loss that is recognized. Again, these operations are for tin alone. A certain small amount of wolframite (tungsten) found with the tin is separated magnetically.

The product which will be obtained here will be a mixture of columbium-tantalum, tin stone and tungsten mineral. Perhaps a market can be found for this kind of a product, but it is not to be expected that the full price for each contained metal can be obtained. Even if such were the case, we would still have a return at the utmost of $1.21 per yard and not $1.36. Were the price of the composite concentrate to be cut only 10 percent to cover the cost of separation, then the returns would be 35 cents gold plus $0.77 cents other metals, equaling $1.12 per yard. It is believed that a 50 percent recovery of these metals will be closer to reality than an 85 percent recovery, which would result in a loss of 20 cents per yard.

The foregoing has not taken into account the extra work entailed in treating this low-grade gravel. Referring, at the risk of boredom, again to the Malay fields where the content is from 5 to 60 pounds of tin per cubic yard, the final product represents a concentration of roughly 100 to 1. The contents of the Bear Creek gravels being far lower than the minimum above mentioned, a similar product would represent a concentration of 2000 to 1.

APPENDIX

This appendix is a recalculation of yardages and average grades in Potato and Bear Creeks, based on average values as shown in the Walter W. Johnson Company report, widths of gravels sampled, and distances between trenches as determined by a steel tape and compass survey made in July 1952.

The average grade per square foot of bedrock is taken from the Johnson report, which was calculated from the sample data collected during the exploration and analyses provided by the operator.

The methods of calculating values are somewhat different than those used by Johnson, but it is believed that these values more equitably distribute the values over the entire area sampled. Further calculations can be made using a cut-off value that would appreciably reduce the yardages that might be profitable. It is not believed that this refinement is necessary at the present time.

AVERAGE GRADE PER SQUARE FOOT OF BEDROCK

Trench	Gold Dollars	Tin Pounds	Columbite-tantalite Pounds	Tungsten Pounds
1	$0.02	.086	nil	nil
2	0.16	.082	nil	nil
3	0.102	.107	.026	nil
4	0.055	.083	.029	nil
5	0.029	.085	.031	nil
6	0.02	.036	nil	.0018
7	0.041	.02	nil	nil
8	0.069	.094	.07	.0045
9	0.096	.028	nil	nil

Block 3
Trench 3 to Trench 4

Trench 3 - Width, 105 feet
Depth, 5.5 feet
Cross sectional area, 64.2 sq. yds.

Trench 4 - Width, 102 feet
Depth, 3.1 feet
Cross sectional area, 35.1 sq. yds.

Average Width, 103.5 feet
Depth, 4.3 feet
Cross sectional area, 49.45 sq. yds.

Length, 2,567 feet, or 855.7 yards

Area, 29,522 sq. yds.
Volume, 42,314 cu. yds.

Evaluation

Gold

Trench	Value or pounds per sq. ft. bedrock		Cross-sectional area		Product
3	0.103	x	64.2	=	6.61
4	0.055	x	35.1	=	1.93
			99.3		8.54

$\frac{8.54}{99.3}$ = 0.086, average value per sq. ft. bedrock

$.086 x 9 x 29,522 = $22,850.03, total gold value

Tin

3	0.107	x	64.2	=	6.87
4	0.083	x	35.1	=	2.91
			99.3		9.78

$\frac{9.78}{99.3}$ = .098 lbs. tin per sq. ft. bedrock

.098 x 9 x 29,522 = 24,709.9 lbs. total tin content

Columbite-tantalite

3	.026	x	64.2	=	1.67
4	.029	x	35.1	=	1.02
			99.3		2.69

$\frac{2.69}{99.3}$ = .027 lbs. per sq. ft. bedrock

.027 x 9 x 29,522 = 7,173.85 lbs. total columbite-tantalite content

Block 4
Trench 4 to Trench 5

Trench 4 - Width, 102 feet
Depth, 3.1 feet
Cross sectional area, 35.1 sq. ft.

Trench 5 - Width, 124 feet
Depth, 3.6 feet
Cross sectional area, 49.6 sq. yds.

Average Width, 113 feet
Depth, 3.35 feet
Cross sectional area, 42.35 sq. yds.

Length, 5,291 feet or 1763.7 yards

Area, 66,491.5 sq. yds.
Volume, 74,693.7 cu. yds.

Evaluation

Gold

Trench	Value or pounds per sq. ft. bedrock		Cross sectional area		Product
4	0.055	x	35.1	=	1.93
5	0.029	x	49.6	=	1.42
			84.7		3.35

$\frac{3.35}{84.7}$ = $0.04, average value per sq. ft. bedrock

$0.04 x 9 x 66,491.5 = $23,936.94, total gold value

Tin

4	0.083	x	35.1	=	2.91
5	0.085	x	49.6	=	4.22
			84.7		7.13

$\frac{7.13}{84.7}$ = .084 lbs. tin per sq. ft. bedrock

.084 x 9 x 66,491.5 = 50,267.57 lbs. total tin content

Columbite-tantalite

4	.029	x	35.1	=	1.02
5	.031	x	49.6	=	1.54
			84.7		2.56

$\frac{2.56}{84.7}$ = .030 lbs. per sq. ft. bedrock

.030 x 9 x 66,491.5 = 17,952.71 lbs., total columbite-tantalite content

Block is not extended upstream above trench 5 because creek narrows and no gravel available.

SUMMARY

Block	Cubic Yards	Total Gold Value	Total Tin Content, Pounds	Total Columbite-Tantalite Content, Pounds
1	76,615	$ 14,309.55	24,796.0	-
2	20,972	14,823.90	11,503.3	1,897.45
3	42,314	22,850.03	24,709.9	7,173.85
4	74,693	23,936.94	50,267.6	17,952.71
Total Bear Creek	214,594	$ 75,920.42	111,276.8	27,023.95

Average per cubic yard:
- Gold - $0.35
- Tin - .519 lbs.
- Columbite-tantalite - .126 lbs.

6	32,508	5,512.06	5,512.1	-
7	8,300	2,242.89	2,156.6	1,207.7
8	44,996	20,811.58	10,756.5	4,442.9
Total Potato Creek	85,804	28,566.53	18,425.2	5,650.6

Average per cubic yard:
- Gold - $0.33
- Tin - .215 lbs.
- Columbite-tantalite - .0659 lbs.

Grand Total	300,398	$104,486.95	129,702.0	32,674.55

Average per cubic yard:
- Gold - $0.348
- Tin - .432 lbs.
- Columbite-tantalite - .109 lbs.

Value per cubic yard:
- Gold - $35 per oz.
- Tin - $1.21 per lb.
- Columbite-tantalite - $3.00 per lb.

	Bear Creek	Potato Creek
Gold	$0.35	$0.33
Tin	.63	.26
Columbite-tantalite	.38	.20
	$1.36	$0.79

Average all deposits:
- Gold - $0.348
- Tin - .522
- Columbite-tantalite - .327

$1.197

Analyses of Samples

Sample No.	Oscar N. Bribach for Keenan Placers Percent Sn	WO_3	Ta_2O_5	Cb_2O_5	U. S. Bureau of Mines Salt Lake City Laboratory Percent Sn	WO_3	Ta_2O_5	Cb_2O_5
1	0.2	nil	nil	nil	0.05*	0.01*	0.01*	0.01*
2	0.01	nil	nil	nil	0.05*	0.01*	0.01*	0.01*
3	0.1	nil	nil	nil	0.05*	0.01*	0.01*	0.01*
4	0.1	nil	nil	nil	0.05	0.01*	0.01*	0.01*
5	0.1	nil	nil	nil	0.05*	0.01*	0.01*	
6-7	0.1	nil	nil	nil	0.05*	0.01*	0.02	
Shaft 1	0.1	tr.	tr.	tr.	0.05*	0.01*	0.01*	
Shaft 2	0.2	nil	nil	nil	0.05*	0.01*	0.01*	
Shaft 3	0.1	tr.	nil	nil	0.05*	0.01*	0.01*	
14	0.1	nil	nil	nil	0.05*	0.01*	0.01*	0.01*
15	No certificate				0.05*	0.01*	0.01*	0.01*
16	0.1	nil	nil	nil	0.05*	0.01*	0.01*	0.01*
17-18	0.2	nil	nil	nil	0.55	0.01*	0.03	0.01*
19-20	0.1	nil	nil	nil	0.6	0.01*	0.07	
21-22	0.1	nil	tr.	tr.	0.2	0.01*	0.02	
23-24-25	0.3	tr.	0.05	tr.	0.4	0.01*	0.06	
26-27-28-29-30	0.5	tr.	0.05	0.09	0.4	0.01*	0.04	
31-32	0.1	tr.	tr.	tr.	0.2	0.01*	0.03	
34-35-36-37-38-39-40	0.6	tr.	0.07	0.14	0.7	0.01*	0.65	
56-57	0.2	0.01	0.05	0.10	0.55	0.01*	0.15	
61-62-63-64-65-66-67	0.2	tr.	tr.	tr.	0.2	0.01*	0.05	
					7.6	0.35	1.75	
Composite	7.0	0.07	0.23	0.10	6.7	0.24	0.4	0.5**
41-47) Trench 5)					1.6	0.01*	0.45	
51-55) Trench 6)	Not used in operator's report				0.05	0.01*	0.01	
48-50) Trench 7)					0.05*	0.01*	0.01	

* Less than

** This analysis was made from a portion of the same sample at a later date.

RECEIVED
OCT 24 1992
DEPT. OF INTERIOR
BUREAU OF RECLAMATION
PROJECT V

FILE COPY
SURNAME:

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

OCT 31 1952

Mr. Edwin J. Lintner
Chief, Additive Alloys Division
Office of Materials
Munitions Board
Washington 25, D. C.

CONFIDENTIAL

Re: Docket No. DMA-654X
(Tin, columbium, tantalum, tungsten)
Exploration Project Contract Idm-E58)
Peggy Keenan d/b/a Keenan Properties
Lawrence County, South Dakota

Dear Mr. Lintner:

In response to a former telephone conversation and likewise your telephone call of October 29, 1952, I am herein setting down the salient chronological dates of action with respect to the above-captioned docket:

5-16-51 - Exploration project application filed.

7-16-51 - Exploration contract (Idm-E58) executed; amount $100,000.00 (90% Government participation - $90,000.00). Exploratory work consisted of sampling the placers on Bear Creek, Potato Creek and Beaver Creek. The contract was drawn up in two phases (I and II). Phase II depended on the findings of Phase I. Phase I called for the expenditure of $19,000.00, and Phase II $81,000.00.

4-16-52 - Phase I completed. Phase I cost exceeded the approved cost. However, the excess amount was paid by the Operator.

5- 2-52 - The final report of the Operator's engineer, dated February 15, received.

6-14-52 - Operator's proposal for Phase II received. The amount requested was reduced from $81,000.00 (as approved in the contract) to $59,680.00.

6-19-52 - Proposal for Phase II referred to DMEA Field Team.

9-21-52 - Received Field Team's report on applicant's proposal for Phase II. Field Team report was referred to the Commodity Members of the Bureau of Mines and the Geological Survey.

10-27-52 - Amendment No. 3, covering Phase II, in the amount of $29,931.00 (90% Government participation - $26,937.90) was approved.

10-28-52 - The amended contract was signed by the Government and Operator's representative.

From the above, you will note that the contract was amended to cover the work to be performed under Phase II, from $81,000.00 to $29,931.00. The work will consist of drilling and test pitting the gravels on lower Bear Creek and likewise on Beaver Creek. An engineer to conduct the work is to be selected who is mutually acceptable to both the Operator and the Government. Furthermore, the contract can be terminated at any time when, in the opinion of the Government engineers, the drilling operation and sampling does not reveal appreciable quantities of the strategic and critical materials, especially columbium and tantalum, which are sought under this exploration contract.

Phase I of the contract indicated a substantial yardage of gravel containing tin and columbium-tantalum mineralization. Because of this fact and due to the urgency of the need for columbium and tantalum, it was deemed advisable to further explore for a possible source of these two commodities.

I trust the above is the information that you requested over the phone.

Sincerely yours,

/s/ 10-31-52

Ernest Wm. Ellis, Chief
Rare and Misc. Metals Division

EWEllis/gla
10-30-52
cc to: Adm. Reading File
Docket
Mr. Ellis

FILE COPY
SURNAME:

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

OCT 29 1952

Mr. A. J. Needham
Executive Officer
Field Team, Region V
2904 Colfax Ave., South
Minneapolis 6, Minnesota

Re: Docket No. [illegible]-654A
(Tin, columbium, tantalum, tungsten)
Exploration Project Contract Idm-458
Peggy Reeman d/b/a Reeman Properties
Lawrence County, South Dakota

Dear Mr. Needham:

Enclosed is an extra copy of Amendment No. 3 covering phase II of the above-mentioned contract, which you may forward to your field representative.

Sincerely yours,

(signed) FRANK E. JOHNSON

Chairman, Operating Committee

B.Ellis/gla/jem 10/29/52

cc to: Adm. Reading File Docket
Operating Committee
Mr. Renick, Rm. 3061
Mr. McKnight, Rm. 4204
Mr. Ellis
Mr. Knouse
Field Team, Region V

Enclosure

Concur:

J. H. Hedges

Member, Bureau of Mines

A. R. Kinkel, Jr.

Member, Geological Survey

700 FILE COPY
SURNAME:

F L Knouse
Ellis

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

Mr. A. B. Needham
Executive Officer
DMEA Field Team, Region V
2908 Colfax Ave., South
Minneapolis 8, Minnesota

OCT 28 1952

Re: Docket No. DMA-~~645~~ 654
(Tin, columbium, tantalum, tungsten)
Exploration Project Contract Idm-E58
Peggy Keenan d/b/a Keenan Properties
Lawrence County, South Dakota

Dear Mr. Needham:

We are enclosing two copies of the executed "Amendment No. 3" covering Phase II of the captioned contract. One copy is for your office and the second copy is to be delivered to the Region Finance Officer.

A copy of a memorandum from Messrs. Ernest Wm. Ellis and F. L. Knouse explains the position taken by this Agency in justifying Phase II of this project.

You will note that the choice of an engineer to direct this program as well as the locations of the work to be done, i.e. churn drill holes and test pits, are to have the prior approval of the Government.

The original contract allowed a total amount of $21,000 for Phase II, and the amendment is for a total amount of $29,931.00.

Sincerely yours,

H. F. Keller

10-28-52 (JHB)

ACTING Chairman, Operating Committee

Enclosures

APPROVED:

J. H. Hedges (JHB)
Member, Bureau of Mines

A. R. Finkel, Jr. (JHB)
Member, Geological Survey

FLKnouse/EWEllis/gla
10-24-52
cc to: Adm. Reading File
Operating Committee
Mr. Renick, Rm. 3061
Mr. McKnight, Rm. 4204 GSA
Mr. Ellis
Mr. Knouse

DRAFT
GLAult
10/29/52

Chronological record of events
Docket DMA-654X (Contract No. Idm-E-58)
Peggy Keenan, d/b/a Keenan Properties
Lawrence County, South Dakota
(Tin, columbium, tungsten, tantalum)

July 16, 1951	Exploration project contract Idm-E58 executed. Amount $100,000.00 (90% Government participation, $90,000.00.) Exploratory work to be done consisted of two parts, Phase I and II, Phase II depending on the outcome of Phase 1 and to commence only on the approval of the Government.
April 16, 1952	Phase I completed.
May 2, 1952	Received a copy of Walter W. Johnson's report dated February 15, 1952.
May 12, 1952	Amendment No. 2 executed to complete payment on Ph.I.
May 22, 1952	One copy of Walter W. Johnson's report forwarded to DMEA Executive Officer, Region V
June 14, 1952	Date of proposal by Miss Keenan on Phase II
June 19, 1952	A second copy of the Johnson report, and a copy of proposed Phase II presented by Peggy Keenan (which reduced the original amount of Phase II from $81,000 in the existing contract to $59,680). Region V Executive Officer requested to make recommendations.
Aug. 22, 1952	Three copies of report from Region V were received by Operating Committee.
Aug. 27, 1952	Original memo from Region V, considered by the Operating Committee this date, received, which enclosed memo from Supr. Engineer, Rapid City Field Office. Further report being prepared.
Sept. 21, 1952	Recd. original and three copies of Region V report on Phase II.
Sept. 26, 1952	Comments on Phase II report received from USBM
Oct. 7, 1952	Comments on Phase II report received from USGS
Oct. 10, 1952	Memo sent to ~~Operating Committee~~ Legal Division with draft of Exhibit "A" for Phase II, for approval.
Oct. 24, 1952	Legal Division's memo received advising that the attached Amendment No. 3 is in satisfactory Legal form.
" "	Letter written to Region V transmitting two copies of executed Amendment No. 3, which was forwarded to Mr. Chambers for surnaming, then to the Operating Committee.
Oct. 27, 1952	Amendment No. 3 and letter to Region V considered and approved by the Operating Committee.

October 28, 1952 Miss Keenan signed Amendment No. 3 to Exploration Project Contract Idm-E58, providing work to be done under Phase II of the contract, estimated cost $29,931.00, 90% Goverment participation $26,937.90.

" " Two executed copies of Amendment No. 3 mailed to DMEA Executive Officer, Region V.

FILE COPY
SURNAME:

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

October 23, 1952

Memorandum

To: Administrator

Through: E. W. Ellis

From: Chief Counsel

Subject: Contract Docket No. DMEA-654, Peggy Keenan d/b/a/ Keenan Properties

There is attached, in satisfactory legal form for execution, Amendment No. 3 to the above-described contract.

Ordinarily, in amending an old form Contract to provide for additional work and the estimated costs of performing it, the amending is written on a new contract form. However, in this case, as the money for performing the additional work was provided for in the original contract; as there is a large number of leased claims involved in Phase I of this contract which would require new Owner's Consents to Lien in order to preserve liens if the amendment were written on a new contract form; and as only two properties are added to the contract for which Owner's Consents to Lien have been provided; Phase II has been authorized ~~for~~ by an amendment to the old form.

J. L. Hofflund

J. L. Hofflund
Chief Counsel

Attachments

HCRubin/ema
cc: Mails & Files
J. L. Hofflund
H. C. Rubin
E. W.Ellis
Chron.

700 FILE COPY
SURNAME:

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

October 15, 1952

Memorandum

To: Legal Division

From: F. L. Knouse
Rare and Misc. Metals Division

Subject: Docket No. DMA-654X
(Tin, Columbium, Tantalum, Tungsten)
Exploration Project Contract Idm-E58, Phase II
Peggy Keenan d/b/a Keenan Properties

Miss Peggy Keenan has promised to supply signed "Owner's Consent to Lien" for the Bear Creek "Seventy Flats Placer 393" and the Upper Beaver Creek, "W. O. Fillmore Extension", contiguous to Placer 392, and a "Map K.P.A. Keenan Properties, Inc., Lawrence County, South Dakota," showing the location of all of the property to be explored.

The above tracts of land --- Bear Creek "Seventy Flats Placer 393" and Upper Beaver Creek, "W. O. Fillmore Extension" -- are not included in the original contract but are to be included in Phase II of the contract.

F. L. Knouse

FLKnouse/gla
cc to Docket File
Division contract file

ROUGH DRAFT
FLKnouse/jem/gla
10/14/52

Exploration Project Contract
Phase II
Peggy Keenan d/b/a Keenan Properties
Docket No. DMA-654X
Contract Idm-E58

EXHIBIT "A"

Description of the Work:

Exploration with churn drill holes, and test pits, placer mining claims in the following areas:

Bear Creek

Seventy Flats Placer 393

Beaver Creek

Placer 392 and Upper Beaver Creek,"W. O. Fillmore Extension", contiguous to Placer 392.

The work to be done consists of the following:

Bear Creek

One line of churn drill holes is to be drilled across the creek channel within 1500 feet of the South property boundary, where it crosses Bear Creek, not to exceed nine (9) holes of approximate average depth of 20 feet (or a total of 180 feet of hole). The spacing between holes is to be approximately 50 feet. If in the opinion of the Government the results obtained from the above work justify additional exploration of this area then a part or all of three (3) additional lines of holes (or a total of 27 holes - 540 feet) may be drilled at intervals of 1500 feet across the creek channel with spacing between the holes of approximately 50 feet and the values in each line of holes is to be checked by one test pit (or a total of 4 test pits - 80 feet).

Beaver Creek

One line of churn drill holes is to be drilled across the creek channel immediately below the confluence of Potato, West Deer and Beaver Creeks, not to exceed nine (9) holes of approximate average depth of 20 feet (or a total of 180 feet of drill hole). The spacing between the holes is to be approximately 50 feet. If in the opinion of the Government the results obtained from the above work justify additional exploration of this area then a part or all of four (4) additional lines of holes may be drilled, one line being across the creek channel up Beaver Creek from the above described work and the other lines of holes being down the Creek and across the channel at intervals of not less than 2000 feet and with spacing between all holes being approximately 50 feet, and the values in each line of holes is to be checked by one test pit (or a total of five test pits - 100 feet).

General Conditions

Each drill hole is to be cased, 6 inches in diameter, and drilled to a depth in the bedrock to where the enriched mineral values are recovered. All material recovered from each drill hole is to be thoroughly washed and the contained tin, tantalum, columbium, tungsten, gold and other minerals or metals are to be concentrated by panning and the free gold values separated and estimated as value per cu. yd. The remaining concentrate is to be split into two equal samples, one of which is to be retained by the Supervising Engineer which is to be analyzed by a Government approved laboratory

for tin, tungsten, tantalum and columbium and the other sample is to be delivered to the Government.

The test pits are to be sunk by using a caisson lining having a beginning diameter of not less than 48", and the caisson is to be continuously advanced ahead of the material being excavated. Each pit is to be sunk into the bedrock to where the enriched mineral values are recovered. All of the excavated material from each separate pit is to be thoroughly washed by a trommel screen having 3/8" holes and the fines containing tin, columbium, tantalum, tungsten, gold and other minerals or metals are to be concentrated by a rougher and cleaner jig unit and a Wilfey type table. From the concentrate produced the free gold is to be removed and estimated as value per cu. yd., and the remaining concentrate is to be split into two equal samples, one being retained by the supervising engineer and analyzed by a Government approved laboratory for tin, tungsten, tantalum and columbium, and the other sample is to be delivered to the Government.

A Supervising Engineer will be chosen by the Government and the Operator, who will direct this entire exploration program and he will write a full report covering the findings and supply the Government with an original and four copies of the report.

The Supervising Engineer shall select the location of the drill holes and test pits. However, before executing this work prior Government approval must be obtained.

Estimated Cost of the Project
(*Indicates allowable maximums)

Independent Contracts:

80 - 6-inch diameter churn drill holes, average 20 feet deep, @ $5.50/ft.*, which includes washing the drill cuttings, and concentrating the contained tin, tantalum, columbium, tungsten, gold and other minerals, or metals, and separating the free gold from the concentrates - 1600 feet of churn drill hole $8,800.00

9 - test pits, average 20 feet deep, @ $25.00/ft.*, which includes washing excavated material, concentrating contained tin, tantalum, columbium, tungsten, gold and other minerals or metals, and separating the free gold from the concentrate -- 180 feet of test pit $4,500.00

The Government will contribute to the costs of the above specified churn drilling and test pit sinking on the basis of the above agreed estimated unit costs as they accrue for units of work actually performed in lieu of actual cost. These unit costs include all cost of the work except those scheduled below to which the Government will contribute on the basis of actual costs.

Labor, Supervision & Consultants:

Engineer Supervisor @ $50/day - 100 days $5,000.00

Engineer will supervise and direct the work, which also includes the selection of the location of drill holes and test pits, surveying, map preparation, engaging workmen, renting equipment, purchasing supplies, keep records, prepare ~~preparation of~~ the required Government reports and a final report of findings.

Operating Materials and Supplies:

Gasoline and lubricants for truck, pumps and washing plant @ $100/mo. - 3½ months $ 350.00

Operating Equipment:

To be rented:

1 - Pickup truck @ $160.00/mo. includes all repairs - 3½ months $ 560.00

Miscellaneous:

Meals and quarters -- 687 days @ $8.00*/day	$5,496.00	
Engineer, and personnel traveling expenses	1,000.00	
Analytical work - 89 samples @ $25/sample	2,225.00	
		$8,721.00

Contingencies:

Unforeseen expenses	$2,000.00*
Estimated Cost of Stage II	$29,931.00
Government Participation 90%	$26,937.90

700 FILE COPY
SURNAME:

Mr. Schmidt
F L Knouse

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

October 15, 1952

Memorandum

To: Chairman, Operating Committee

From: Ernest Wm. Ellis and F. L. Knouse
Rare and Miscellaneous Metals Division

Subject: Docket No. DMA-654X (Tin, Columbium, Tantalum, Tungsten)
Exploration Project Contract Idm-E58
Peggy Keenan d/b/a Keenan Properties

It can be readily understood that any appraisal of the results of Phase I based on present assay values and tonnage and scale of operations contemplated by the Field Team, would lead to the conclusion that as a result of Phase I, the project does not appear to be too economically sound. However, in the many discussions that have taken place concerning this project in our different offices, the point has been brought out that the situation regarding tantalum and columbium is very critical and promises to become more so in the immediate future. This office is therefore using a different yardstick in the appraisal of columbium-tantalum bearing material than would be dictated by a cost-profit analysis based on present figures. For this reason, we have decided that regardless of any agreement with the report of the Field Team from the data available to them, we feel impelled in the light of longer range considerations to recommend that every possible effort be made to explore the full possibilities for the ultimate production of these metals, whether such may seem profitable at this time or not.

Ernest Wm. Ellis

F. L. Knouse

FSSchmidt/FLKnouse/EWEllis/jem/gla

cc to: Adm, Reading File
Operating Committee
Docket file

10/7/52 zgla

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

October 7, 1952

Memorandum

Re: DMA-654
Keenan Properties
Lawrence County, South Dakota
Tin, Columbium, tantalium, gold
$59,680 (Phase 2)

To: Mr. E. Wm. Ellis

From: E. T. McKnight

Subject: Review of data on results of Phase 1, claimed by applicant as justification for Phase 2.

Phase 1 included exploration on Potato Creek and Bear Creek. The applicant has requested the continuation of exploration under Phase 2 of the original contract. The proposal involves churn drilling and sinking test shafts in gravels on Beaver Creek, Sand Creek, and additional portions of Potato Creek and Bear Creek.

This is an unusual case in that the original report submitted by the applicant's engineer, giving the results of Phase 1, was not in agreement with the applicant's beliefs, hence applicant had new assays made by a different chemist, and a revised engineering analysis by Bill Broadgate is presented which is largely devoted to a refutation of the earlier report.

The original report, by Walter W. Johnson, is a concise well-presented engineering report which states clearly the procedures that were followed, and presents in the form of tables most of the details on which the conclusions were based. Unfortunately, the base map on which yardage estimates were based was defective. To satisfy this criticism of the report, the field team has remeasured the distances and recalculated the yardage of gravel and also its value, using the assays given in the Johnson report, but the higher prices for tin, columbium, and tantalium as claimed in the Broadgate memorandum (tin, $1.21 per lb; columbium, $3.00 per lb; tantalium, $3.00 per lb.).

The field team calculation in turn contains a very serious error in the average grade of columbite-tantalite per square foot of bedrock in Trench 4 on Bear Creek, which error accounts for the apparent high content of these constituents in the field team's blocks 3 and 4. When this error is corrected, the field team report indicates that the total yardage of gravel in the tested areas on Bear and Potato Creeks is 300,398 cu. yd. containing $94,487 in gold, 129,702 lbs. of tin, and 32,794 lbs. of columbite-tantalite, valued at $348,462, or $1.16 per cu. yd. The yardage and grade on the Potato Creek blocks are too low for serious consideration, as shown in the field team report. The Bear Creek

yardage amounts to 214,594 cu. yds. containing 31¢ per cu. yd., total $65,920 in gold; 0.52 lbs. per cu. yd., total 111,277 lbs. of tin; and 0.126 lbs. per cu. yd., total 27,144 lbs. of columbite-tantalite; total valued at $1.31 per cu. yd., (instead of $2.15 shown in the uncorrected field team report).

The field team has indicated that any operation on the Bear Creek deposit will cost at least $1.00 per cu. yd., including amortization of a processing plant, and an expensive and questionable water impoundment downstream with consequent high pumping costs. Considering the metallurgical losses that are expectable in recovery of all constituents, increased metallurgical costs that can be expected in separating constituents to a marketable form, and discount expectable in prices owing to probable deficiencies in the marketed products, the field team concludes that the Bear Creek gravels cannot be operated at a profit. Certain milling tests are being carried out at present to determine what recoveries and separations can be achieved.

The field team accepted most of the data contained in the Johnson report, with the exceptions mentioned, and made their calculations from this data. The extensive criticisms of the Johnson report made in the Broadgate memorandum are, for the most part, irrelevant, and have been ably refuted by the field team. One of the criticisms accuses Johnson of poor arithmetic, with errors always tending to minimize the sampling results. Before I read this criticism I had checked in a cursory way all of the calculations, i.e., either I had carried out the indicated multiplications and additions, or on many of the multiplications I had, by inspection, checked the first two or three significant figures. Although I found many small discrepancies of the type that might come from using a slide rule, I found no mistake that I considered significant, considering the probable error, entering into all calculations, that is inherent in cutting a vertical channel sample that has to be maintained at 6" x 24" in plan in order to relate the values found to the total gravel yardage.

The Johnson report attempts a rough check of its results by applying to the total yardage of gravel a composite assay made from the rejects from all of the concentrated samples. Such a rough check fails, of course, to weight the individual samples that have contributed to the composite sample against the tonnage of gravel that they represent. This check was meant to be only a rough approximation. Considering the sniping that the figures entering into this check have received from Engineer Broadgate, it would have been better for Johnson

to have omitted this appendage of his report. Broadgate points out certain arithmetical errors (which are small and compensating), but he also impugns one of the quoted observation measurements, stating that "according to a record made September 24, 1951", this figure should be different from that given by Johnson. He then goes on to correct the figure and derive a new and higher value for the constituents other than gold, using a permissible increase of about 20% in the value of the tin, columbium, and tantalium over that used by Johnson. Finally, by using the results of the new assays (the "Amundson-Keenan" assays) he derives a value of $1.54 per ton for the gravels instead of the $0.88 per ton that has been derived by Johnson (and the $1.16 derived by the field team, as corrected by me).

It is, of course, permissible to recalculate values based on changing prices of minerals, but the other manipulations that have appeared to raise the average grade of the gravels are not valid. Considering that the composite assay was meant only as a rough indication of the value of the gravels, to accept this one assay for the whole deposit in place of the many assays weighted for the different blocks would be a poor engineering decision. In view of the complete lack of information as to what material was used for the Amundson assays, how it was concentrated, and what volume of gravel each assay represents, these assays should be ignored.

Mr. Broadgate has a "grave doubt" concerning Johnson's operation of the jig in concentrating his samples, but the reasons for this doubt are not given. At the same time, we are told nothing about the procedures used in concentrating the Amundson samples which are proposed to supercede the results obtained by Johnson. The Bureau of Mines' engineers who had general supervision of this project were satisfied with Johnson's concentrating procedures and accepted his results as a basis for their calculations.

Phase 1 of this project was set up to see if an initial exploration would prove promising enough to warrant further exploration. The most favorable grounds on Bear Creek and Potato Creek were tested first, and the results of Phase 1, as analysed by the field team, show that neither of these areas contain economic deposits. The other areas proposed for exploration under Phase 2 at a cost of $59,680 are less promising areas in that they are farther from the bedrock source of the tin and columbite-tantalite, the gravels are more limited, or the water problem is even more serious. Some of the gravels, such as those on Sand Creek in Crook County, Wyoming, have already been completely worked for gold, and the chances are that the tin and columbite-tantalite left

in the tailings from the gold operation have been distributed so heterogeneously that it would be very difficult to interpret any results obtained from the diamond drilling and shaft sinking that are proposed under Phase 2. I am in agreement with the field team's recommendation that Phase 2 should be denied. Considering the modifications I have made in the field team's calculations, I do not believe that the results of milling tests now being carried out will be pertinent to this conclusion.

Edwin T. McKnight

Edwin T. McKnight
Geologist

GENERAL SERVICES ADMINISTRATION

Emergency Procurement Service
Washington 25, D. C.

October 3, 1952

Mr. F. L. Knouse
Bureau of Mines
Room 4640, Interior Building
18th & E Streets, N. W.
Washington, D. C.

Dear Knouse:

Attached is a copy of a letter received from Mr. F. H. Driggs, Vice President, Technical Development, Fansteel Metallurgical Corporation, Chicago, Illinois, dated May 11, 1951.

I wrote Mr. Driggs in regard to whether this work was done by J. Driskill for the Fansteel Metallurgical Corp., and he replied that such was the case.

I sent a copy of this report to Mr. Weston Bourret, Room 3618, Department of the Interior, 19th and E Streets, N. W. Washington, D. C., under date of May 17.

Trust this will be of use to you.

Very truly yours,

Malcolm H. Carpenter

Attachment

BUREAU OF MINES
WASHINGTON, D. C.
OCT 6 4 34 PM '52

ANSTEEL METALLURGICAL CORPORA

NORTH CHICAGO, ILLINOIS, U. S. A.

CONFIDENTIAL

May 11, 1951

General Services Administration
Emergency Procurement Service
Washington 25, D. C.

Attention Mr. Malcolm H. Carpenter

Gentlemen:

We refer to your letter of April 13, 1951, requesting information relative to certain placer operations which were conducted in the Tinton area during the year 1937.

In accordance with this request and acting on the assumption that this information shall be classified CONFIDENTIAL for use only in government agencies, we are submitting the following information:

1. These placer operations, designed to recover the tantalite-columbite and cassiterite values from the river beds and stream gravels in that region, wer were conducted by J. Driskill.

2. The placer concentrates containing the tantalite and cassiterite produced from these operations and weighing 11,072 pounds were shipped to Fansteel Metallurgical Corporation in 1937 for further refining and separation into tin and tantalite fractions.

3. These Concentrates were initially separated into three fractions as follows:

   (a) Highly magnetic fraction consisting of magnetite and ilmenite, 817 pounds

   (b) Tantalite-columbite fraction weighing 3,670 pounds

   (c) Tin fraction weighing 6,578 pounds, containing appr approximately 53% tin

The tantalite fraction, (b) above, was further concentrated to a net weight of 1,732 pounds with the following analysis:

General Services Administration
Emergency Procurement Service
Washington 25, D. C.

May 11, 1951

Ta_2O_5 44.03%

Cb_2O_5 27.06%

Since the initial placer operations were conducted by J. Driskill we have no accurate information concerning the cubic yards of alluvial material treated, or the exact location of the alluvial operations conducted by Mr. Driskill.

We trust that the foregoing will be of some assistance in your compilation of data regarding the Keenan properties.

Very truly yours

FANSTEEL METALLURGICAL CORPORATION

Vice President-Technical Development

F H Driggs

ER

CLASS OF SERVICE

This is a full-rate Telegram or Cablegram unless its deferred character is indicated by a suitable symbol above or preceding the address.

WESTERN UNION

1201

W. P. MARSHALL, PRESIDENT

SYMBOLS
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NL=Night Letter
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:WT002 36 NL COLLECT=SIOUX CITY IOWA OCT 2:

=PEGGY KEENAN= 81.04 1952 OCT 3 AM 8 25

605A 400 CATHEDRAL AVE NORTHWEST=

:AVAILABLE STREAM WATER YOUR PROJECT TINTON DISTRICT BLACK HILLS SODAK NORMALLY ONE THOUSAND GALLONS PER MINUTE. THREE HUNDRED GALLONS PER MINUTE AVAILABLE DURING THE DRY PERIOD. THIS BASED ON MY OBSERVATIONS stream 1944-1948-1950-1951=

EARL R AMUNDSON=

Earl R. Amundson, Engineer did re-check on K.P. 1951.

STREAM 1944-1948-1950-1951=

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

KEENAN PROPERTIES, INC.

SPEARFISH, SOUTH DAKOTA

TIN
COLUMBIUM-TANTALUM
TUNGSTEN
GOLD

TELEPHONE
SPEARFISH 2F14

6421, Tower Building,
Washington, D.C.

October 2nd. 1952.

Mr. Ernest Ellis,
Chief, Rare & Miscellaneous Metals,
D.M.E.A.
Department of the Interior,
Washington, D.C.

Dear Mr. Ellis:

Under separate cover we are submitting information from our research files which has been compiled for reference in the production and recovery of Keenan Properties' placer gravel values in Bear, Potato, Beaver and Sand Creeks etc., (Docket 654X Contract Idm -E58.)

This production data on creek water supply and its development, the gravel washing plant with rougher jigs, (see blueprint attached), the cleaning plant reconcentrating the strategic metals, with gold-saving devices, is the result of four years investigation and of practical application under the guidance of competant and experienced engineers.

When the time arrives for actual construction of dams, water lines, additional water supply, installation of equipment, Keenan Properties' executive personnel will have, in addition to our Government engineers, the aid of the documented information of the Bureau of Mines (herewith submitted); our associate, the E.J. Duffy Construction Corporation (dams, water supply, pumps, equipment and earth-moving experience;) J.V.N. Dorr Company's experienced placer engineers and their Stamford Connecticut Laboratory; Earl R. Amundson, Consulting Engineer with several years experience studying Keenan Properties' placer deposits; and others who may be deemed helpful.

Thanking you for your many courtesies,

Yours very truly,

Peggy Keenan.

Peggy Keenan.
Keenan Properties.

DAM SITES AND WATER SUPPLY, KEENAN PROPERTIES.

The attached U.S.G.S. Topographic Survey, 1939, of the Sundance Quadrangle, Wyoming, and the Tinton and Vicinity, South Dakota, is marked to indicate Keenan Properties location of creek water supply and planned development for the production of placer gravel concentrates;

Location of 1951 Test Trench #1.
Dam at Two Bit Gulch, Bear Creek, (Dam#1.)
Dam at Conner's Rock, Bear Creek, (Dam #2.)
Dam at Mill site, Potato Creek, (Dam #3.)
Additional water supply as follows:

As a safeguard, it is pointed out that the Beaver Creek flow of water is even larger than the flow in Bear Creek. At a location, 5440 feet elevation on Beaver Creek, the installation of a pump can furnish water to a site at the Winner Mining Co. elevation 5700, over a distance of 2100 feet. From this point to the receiving point on Bear Creek at 5320 feet elevation the water flows by gravity, descending 380 feet. The receiving point on Bear Cr. is 1000 ft above Dam #2.

With reference to the location, construction and costs of the dams for impounding stream water, it is pointed out by engineers from the South Dakota School of Mines that the dam sites (indicated on reference map, Sundance Quadrangle) are at narrow points where solid rock formations are at eash wall and bedrock is solid. Construction timbers are available at sites, from the forests, while rock, earth and gravel is immediately available from the hillsides. In addition, Keenan Properties are fortunate to be in close proximity to Bentonite Clay mines, a product highly suitable for mixing with fill material, and available in quantity (when bentonite is used in the fill, the requirements for earth or sand and gravel is considerably reduced) See Taggart, 3-10. The application of bentonite clay not only increases strength and eliminates seepage, but considerably reduces costs. It has been estimated by engineers in Rapid City, D.D. and Washington D.C. that the cost of the dam at Two Bit Gulch should not exceed $3,500.00, and the dam at Conner's Rock should not exceed $5,000.00.

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SYMBOLS

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PHONE.

W. P. MARSHALL, PRESIDENT

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PEGGY KEENAN TELEGRAM= TDDW SPEARFISH SDAK 1 323P

DLR 605 A -40 00 CATHE DRAL AVE NORTHWEST=

HAVE CHECK ED DATA AVAILABLE ON WATE RFLOW IN BEAR CREEK FROM W C DRI SKILL REPORT MINIMUM FLOW DURING APRIL MAY JUNE 100 0 GALLONS PER MINUTE TAPERING JULY AUGUST SE P TEMBER INCREASING AGAIN WITH FALL RAINS IN LATE SEPTEMBER AND IN OCTOBER=

T J OLTMANS ENGINEER=

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

September 25th.1952.

KEEMAN PROPERTIES PLACER OPERATIONS.

During the past four years of investigation and exploration, the methods and costs of a placer gravel operation in Bear Creek, Potato Creek, and other streams controlled by Keeman Properties have been studied with the aid of the J.V.N. Dorr Co., Bureau of Mines Records, Earl R.Ammundsen, Consulting Engineer, W.C. Driskill, Engineer, and other experienced placer engineers. In addition, a Pilot Plant operation and testing during two consecutive years enabled Keeman Properties to formulate plans for production particularly applicable to the area concerned.

It has been established by several years testing that the Bear and Potato Creek placer gravels contain values not less than $1.25 per cubic yard, and there is every indication that the values will average $1.54 per cubic yard. This is exclusive of current bonus prices.

The economic recovery of the values in Tin, Columbite-Tantalite, Tungsten and Gold contained in these placers, by established and proven methods presents no obstacle or difficulty. A considerable amount of data on successful operations closely paralleling Keeman Properties placer is available through the Bureau of Mines Publications, Mining and Metallu Engineering and Mining Journal, Mining World, recognized Text Books, and from experienced Placer Engineers.

Recent advances in mining technology and the development of specialized mining equipment has made possible profitable recoveries fr placers previously considered questionable. In the Bureau of Mines Information Circular 7615, 1950, by M.D. Gardner and Paul T. Allaman, page 68, it is stated " Present mining costs at some of the dragline placer mines would not have been thought possible a few years ago."

Attention is particularly directed to the attached September 19 Mining World, and article (pages 44-47)"on Columbium, now being recov from Nigerian alluvial deposits. There is a definite parallel and w similarity in the Nigerian deposits described, and the Keeman Propert deposits in which Cb-Ta is found in conjunction with tin. The Niger deposits are described as containing 0.88 pounds tin per cubic yard, columbite "in amounts as high as 0.02%." Keeman Properties deposits contain 0.628 pounds of tin per cubic yard minimum; 0.28% columbite; 0.10% tantalite; 0.07% tungsten, and in addition, approximately 604 cubic yard in gold. Separation of the tin, columbite and tantalite Nigerian concentrates is an accomplished fact. As early as 1957, s of tin, columbite-tantalite and tungsten concentrates recovered fr a small area of what is now Keeman Properties Placer gravels was a (see attached separation data, Fansteel Metallurgical Corp.)

Para.2, column 2 of the above article shows that columbite occurs in "proportions up to 4.0% of the amount of tin." In Keeman Properties deposits, columbite occurs in proportions up to and in excess of 4.0% of the amount of tin. In no instance on Keeman Properties placers will 70 feet of barren overburden have to be removed as in the Nigerian operations,(see cut, page 46, column 1.)

Operating without the benefit of modern equipment and high prices supported by Government bonuses, a number of successful dragline-fed portable washing plants are reported by the Bureau of Mines. These are primarily recovering gold only, without supporting values as contained in Keeman Properties deposits. For example: the attached Information Circular 6961 "Placer Operations of Humphries Gold Corporation, Clear Creek, Colorado." (see page 2, para1, Introduction,) describing an operation similar to that planned by Keeman Properties, treating 5000 cu.yards per day, at a cost of 20¢ per cu.yd, using about 1500 gallons water per minute. (According to the Bureau of Labor Statistics and Costs, the increase since 1956 is 96.7%) Today, this operation cost would therefore be 39¢ per cubic yard. Other operations referred to would have comparable increases in costs.

E.D. Gardner and Paul T. Allsman, in Information Circular 7015, May 1958, "Power Shovel and Dragline Placer Mining," para 2, page 2, Introduction, refer to "considerable advance in techniques, new installations, and the substantial number of plants now being operated successfully." See also page 24, Movable Land Plants; page 37, Table 8, Wash Water; page 64 Table 10, Costs; page 49, Costs; page 59 para 5; page 68, Costs and Summary. Several other dragline operations are referred to in Peele, Vol.I, 10-604,5,6.

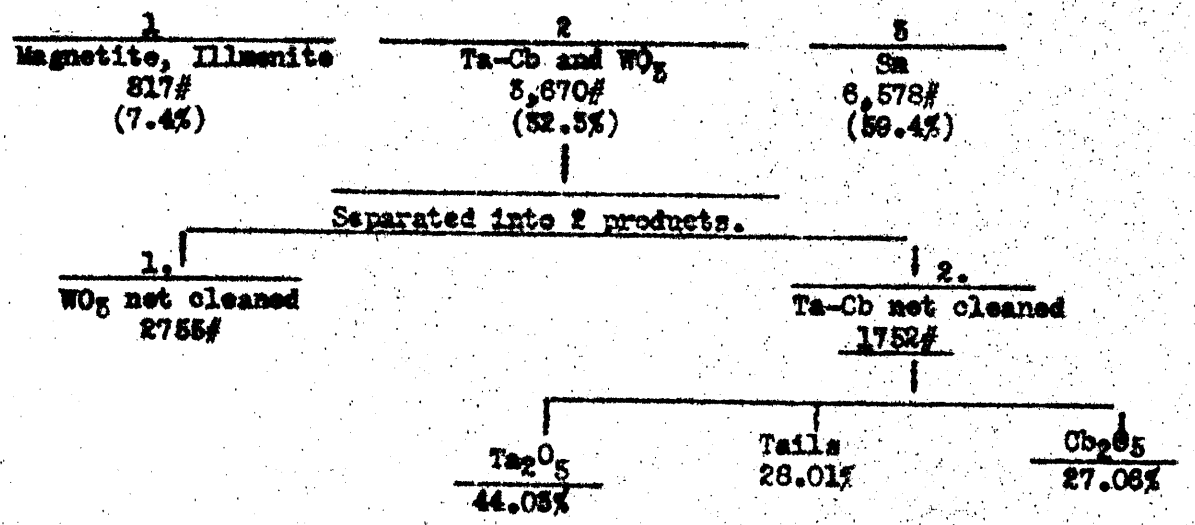
Attached, see Keeman Properties Outline of Bear Creek Placer Operation showing water use.

With reference to Taggart's Handbook of Mineral Dressing, p.2-221, "Only important domestic production (Tantalum-Columbium) is from the Black Hills, S.D. Output of concentrates was 8 tons in 1957, 18 tons 1958, 540 lbs. 1959, and in two years of former activity 28.5 tons of concentrate ranging from 38.7 to 57% Ta_2O_5.

It is known that of the total concentrates above, produced by Fansteel Metallurgical Corp. during their operation, approximately 12,000 lbs of this concentrates was recovered from a small area of what is now part of Keenan Properties placer gravels.

Separation Data on Tantalum-Columbium Concentrates
by Fansteel Metallurgical Co. 1957.

The first separation gave 3 products, as follows, from 11,072 lbs.



KERRAN PROPERTIES.

OUTLINE OF BEAR CREEK PLACER OPERATION.

Showing

PATER WEE.

TREATING 125 CUBIC YARDS PER HOUR. OPERATING 20 HOURS PER DAY.
(Allowing for 20% shutdown time.)

1. SPRING STREAM FLOW: April through mid-July, plus 1000 gallons water per minute minimum average.

2. DAM #1. 3,000,000 cubic feet capacity, at Two Mile Gulch.
   DAM #2. 2,500,000 " " " at Conner's Rack.

3. OPERATION STARTS at Trench #1. (1931 Phase 1, test area.) 2000 feet below Dam #2, and 6000 feet below Dam #1. Water supplied by Sand Pump at pure head.

4. OPERATION: a. Movable Washing Plant, Trommel, Pan American Rougher Jigs, etc. Rougher concentrate delivered to
   b. Semi-Movable Cleaning Plant, Fulcher jigs as cleaners, amalgamator, scavenger jig, table etc. Amalgam sponge and clean concentrate delivered to Mill.

5. PATER. Washing Plant:

   a. From Dam #2, 1000 gallons per minute fresh water to washing plant circuit, distributed as follows: 600 g.p.m to trommel, 320 g.p.m to rougher jigs (4 units @ 80 g.p.m per unit, having a capacity of 25-30 cu.yd. gravel per hour per unit) #1.

   b. Dewatering screens deliver feed from trommel to jigs, diluted 4-6:1 and overflow water from dewatering screens is returned to trommel sprays as required for efficiency.* Overflow from rougher jigs recirculated through the hopper at approx. 300 g.p.m. Total wash water in circulation 1300 g.p.m (1000 g.p.m new water, 300 g.p.m from dewatering screens, 300 g.p.m from jig circuit.)

   c. Total wash water per cubic yard of gravel, approx. 570 gallons. Overflow from plant is carried by drainage ditch to cleaning plant settling pond.

   d. Allowing for 20% loss for contingency and shutdown time operation at 1000 g.p.m new water for 18 hours uses 900,000 gallons per day. At flow of 1000 g.p.m for 24 hours, dam receives 1,440,000 gals water, and overflow is diverted to cleaning plant pond.

   e. From the above, (1000 g.p.m new water, or 87 miner's inches #3) for treating 2000 cu.yds gravel per day, the water duty is 22.7 cubic yd. gravel washed per miner's inch new water supplied. #4.

#1. See Taggart, Mineral Dressing, 12-24,26. Pan American Placer Jigs.

* During high water level in Spring, new water may be used instead of returning water from overflow of dewatering screens.

#2. See I.C. 7015 para 3, page 29. Water per c.yd.

#3. Based on calculations using 1.5 cu.ft. per minute equals 1 miner's inch.

#4. See Mining & Metallurgy, October, 1936, pp 467-70 and attached photostats.

[illegible]

[illegible]

[illegible]

6. WATER. Cleaning Plant:

Note:- Rougher concentrate recovery total per 20 hour day, approximately 20,000 pounds maximum.

/5. This water may be excessively dirty, see Taggart, 11-30.

a. Water requirements for 2 cell, 12x12 Pan American Pulsator jig as cleaner, is approx. 12 g.p.m per cell, or 24-32 g.p.m for 2 cells. /5. The weight of clean concentrate product at this stage is approximately 6000 pounds.

b. Water requirement for scavenger jig (1 cell 12x12) is approx. 12.g.p.m.

/6. See Taggart, 11-30,31, Water consumption.

c. Water requirement for cleaner concentrating table is approx. 25 g.p.m /6.

d. Water requirement for amalgamator and misc. feeders etc. approximately 70 g.p.m maximum.

e. Total requirement for cleaning plant, 150 g.p.m maximum during short,(approx.2 hour) operation. Water obtained from small settling pond, receiving used water from the Washing Plant and new water from overflow drainage.

/7. See Taggart 11-30,31.

f. The Pulsator jig capacity per hour is in excess of daily production from rougher jigs. /7. The 3 shift, 20 hour operation of the washing plant leaves 4 free hours for the operating crew to service. Part of this crew will operate the cleaning plant during this period.

7. SUMMER STREAM FLOW: August through September, exclusive of any rainfall, is at a minimum 300 g.p.m (26.7 miner's inches) or 432,000 gallons per 24 hours.

a. Total requirements for washing plant, (see para 5.d.above) is estimated at 960,000 gallons water per day.

b. Water loss per day, approx. 528,000 gallons, (960,000 less 432,000).

c. Dams #1 and 2, at a total of 5,300,000 cu.ft. plus, hold a total of approximately 39,644 gallons of water. At a loss of 528,000 gallons per day, fresh water supply is enough for 75 days, exclusive of evaporation, or addition of new supply.

d. Stream flow in October returns to approximately 1000 g.p.m.

9/26/52 jem

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON 25, D. C.

September 25, 1952

Memorandum

To: Ernest William Ellis, DMEA Member,
Columbium-Tantalum Commodity Committee, Room 4640

From: A. J. Kauffman, Jr., Bureau of Mines Member
Columbium-Tantalum Commodity Committee

Subject: Docket DMEA 654X, Keenan Properties, South Dakota.

The subject docket as well as the "Preliminary Report on Proposal for Phase II. Keenan Properties", (D. H. Mullen to A. B. Needham, Aug. 20, 1952) and the "Report on Proposal for Phase II, Keenan Properties", by J. A. Redden, U.S.G.S.; R. S. Hill, Bureau of Mines; and D. H. Mullen, Bureau of Mines, (submitted through A. B. Needham to Operating Committee, DMEA) have been reviewed.

The need for columbite-tantalite is critical, and it is hoped that domestic production, especially from low-grade deposits, eventually will contribute a significant portion of our requirements. Emphasis, therefore, must be placed upon exploitation of these low-grade deposits. With reference to the subject docket, it must be decided whether the need for this material is critical enough to warrant an expenditure of $59,680, for Phase II, after considering the report and recommendation of the Field Team.

A. J. Kauffman, Jr.

Attachment

SEP 26 1952

9/21/52 gla

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D. C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

September 19, 1952

Memorandum

To: Operating Committee, Defense Minerals Exploration Administration, Interior Building, Washington 25, D. C.

From: Executive Officer, Field Team, Region V

Subject: Report on proposal for Phase 2
Docket DMEA-654, Contract Idm-E58 - Keenan Properties

Here are the original and three copies of the subject report denying the request of the operator to initiate Phase 2 of their exploration contract.

One copy of the report has been retained by this office.

A. B. Needham
Executive Officer
Field Team, Region V

Attachments

ABNeedham:dg
cc Zinner
Dutton
Mullen
Redden
Region V
files
df

Reviewed by DMEA opr. Com. 9/24/52.

KEENAN PROPERTIES

Tin, Tungsten, Tantalum-columbium

DMEA Docket 654

Contract Idm E-58

Proposal for Exploration under Phase II

by

J. A. Redden, Geologist
U. S. Geological Survey

R. S. Hill, Mining Engineer
U. S. Bureau of Mines

D. H. Mullen, Mining Engineer
U. S. Bureau of Mines

Proposal for Exploration under Phase II
Keenan Properties

SUMMARY

An examination and analysis of the results of the exploration of Keenan Properties under Phase I show that far more work was accomplished than originally intended. This additional work permits certain calculations concerning available yardage and average grade of the deposits that would not have been possible had the original plan been followed. This additional data therefore must be included in consideration of any proposal for further exploration. Other areas not included in the original proposal have been examined. Investigations have been undertaken to determine the recoverable value of the product that would be produced in any operation which, in turn, would determine the advisability of further exploration and the ultimate success or failure of any operation based on that exploration.

CONCLUSIONS

An analysis of the results of Phase I of the exploration show that only a relatively small portion of the gravels in Bear Creek are sufficiently high in values to justify a mining operation.

The estimated costs of an operation are such that the yardage available would not be sufficient to amortize equipment and return a profit.

Available water supply, without extensive storage facilities, is inadequate for more than small hand operations.

Examinations of the "High Bar" on Potato Creek, Seventy Flats, Upper and Lower Beaver Creek, Mallory and Spotted Tail Gulches and Sand Creek

have not shown a sufficient volume of gravel, nor has available data indicated values sufficiently high to warrant further exploration. Inadequate water supply in these areas precludes the possibility of any operation other than hand work.

It is therefore recommended that the proposal for exploration under Phase II be denied.

REPORT ON PHASE II OF PROPOSAL

The proposal for continuation of the exploration of the Keenan Properties under Phase II of the original contract has been carefully analyzed and examined.

The report of the operator on the results of Phase I is in the form of a report by Walter W. Johnson Co. of San Francisco, Placer Mining Consultants, employed by the operator to conduct the explorations. In the transmittal letter that accompanied the proposal for Phase II, the operator takes numerous exceptions to the report. Since the report by the Walter W. Johnson Co. is the operator's report, it would appear to be the responsibility of the operator to rectify any errors in that report. However, since the Bureau of Mines maintained an observer at the property for almost the full period of the exploration, and having considerable knowledge of the property and the adjacent area, it is possible to clarify many of the objections of the operator. This is not normally the function of either the Bureau of Mines or the Defense Minerals Exploration Administration, but is done in the interests of assisting in the development of potential deposits of strategic minerals. Clarification of disputed items will be made as nearly as possible in the order in which they occur in the operator's proposal.

On page 2 of the transmittal letter it is indicated that the report by the Walter W. Johnson Co. is the work of that company and L. E. Shaffer, observer for the Bureau of Mines. L. E. Shaffer represented the Bureau of Mines from the time the exploration was started, on August 13, 1951, until September 15, 1951, when he was relieved of his duties because of personnel limitations imposed by law. Any work performed by L. E. Shaffer in connection with the exploration after that date was for the account of the Walter W. Johnson Co. and not for the Bureau of Mines.

On the same page is an exception to the distances used in calculating results. It must be pointed out that the maps provided by the operator were photostatic copies of the maps referred to in the proposal. No bar scale or indication of scale other than that shown on the title were provided. Further, the titles of these maps indicate that they were prepared from a compass and paced survey, which is subject to considerable error. It is apparent that the Walter W. Johnson Co. was in error in accepting these maps without closer examination as to scale. The operator is also in error in not providing better maps or arranging with the consultant to rectify any errors in survey or reproduction.

In July 1952 Bureau of Mines personnel made a compass and steel tape survey of both Bear and Potato Creeks. The distances, as determined by that survey, have been used in a recalculation of values and yardages and are shown as an appendix to this report.

On page 3 of the same transmittal letter item 7 indicates that trenches were not made from rim to rim. This is not strictly true as observation shows that the trenches extended to, and in some cases beyond, the limits of available gravel. The item also indicates that the placement of sample cuts and distances used in calculating grades were in

error. In sampling operations of this type it is customary to make preliminary tests by panning in order to eliminate obviously worthless material. This procedure was followed in this instance and accounts for the elimination of certain portions of the gravel deposits. It is noted that the original maps to which the operator refers show distances only in a very general way. Again, these maps were made by pacing and subject to considerable error.

In the second paragraph of this same item exception is taken to the inclusion of only two sample cuts in trench 8 on Potato Creek. Maps that accompanied the report show four sample cuts in this trench. No analyses of cuts 59 and 60 in trench 8 are given in the report and it is therefore reasonable to conclude that the values were too low to be considered and the area influenced by the samples was eliminated from the calculations.

Attention is directed towards a memorandum concerning exploration of the Keenan Properties by William C. Broadgate, consultant to the operator. There is no information available to the Bureau of Mines to indicate the competency of Mr. Broadgate to act as consultant.

No attempt is made in this report to analyze the numerous calculations presented in the memorandum as many of them appear to be based on unsupported facts and data of doubtful value. It is known that Mr. Broadgate did not visit the project at any time during the exploration and there is no indication that he has ever visited the property. Therefore, the statements presented must be based on information supplied by others. The following comments will, therefore, be directed towards the conclusions as listed where they appear to be pertinent to the exploration.

1. Distances between trenches as used by Walter W. Johnson were incorrect. However, a recalculation based on actual taped distances does not show an error of 80 percent.

2. The statement that the method of preparing samples was unreliable can not be supported successfully. It is simple to demonstrate that regardless of the amount of concentration nothing can be recovered that does not exist in the original material. In the ultimate extraction of metals from any material, ore or concentrates, the process is one of continual concentration but always at the expense of recovery. Regardless of the care exercised in any step, there is always a small but appreciable loss. It is noted in the Johnson report that in a comparison of the Johnson and Amundson results that the Johnson results are slightly higher than those of Amundson when reduced to the same units.

There is considerable doubt as to the value of the composite sample as applied to the entire deposit. This composite was collected from the rejects of each sample as they were split after jigging. No attempt was made to weight these rejects according to yardage influenced or value of the gravels in any block. The original purpose of this composite was to determine the type and approximate grade of a concentrate that might be produced in any operation. This purpose was accomplished beyond any reasonable doubt.

The inclusion of the composite analysis is unfortunate as it merely confuses the calculations based on individual trenches. If the purpose of such a sample were to determine grade, it would have been far simpler to collect a quantity of gravel from selected points in Bear and Potato Creeks and concentrate them as one sample. Such a method might be advantageous in some instances but it could not possibly indicate the average value of all the gravels under consideration.

To illustrate this point, the following table shows the relative influence of the composite sample to each block.

Block	Yardage	Percent of Total Yardage	Percent of Total Value Represented by Each Block	Percent of Composite Sample Represented by Rejects from Each Block
Bear Creek				
1	76,615	26.6	8.2	45.0
2	20,972	7.3	6.4	23.1
3	42,314	11.5	22.9	10.3
4	74,693	26.2	49.9	7.0
Potato Creek				
6	32,508	11.2	2.3	4.9
7	8,300	2.9	1.6	4.2
8	44,996	14.3	8.7	5.4

A simple examination of the table shows the possible erroneous results that can be obtained by applying such a composite to the entire deposit.

3. Arithmetical or other errors, if they exist in the Johnson report, have been fully corrected in the attached appendix.

3. (c) The introduction of the factor of weight of gravel is completely redundant. Authorities on weights of material almost universally use 100 pounds as the average weight of 1 cubic foot of gravel. There is not reason to believe that the gravels of the Tinton area vary greatly from the average of gravels in other areas. Furthermore, the weight of the gravel in the bank (2700 pounds per cubic yard) is <u>not</u> used in any of the calculations on individual blocks and has no bearing on calculated yardages or values. The only purpose of using this figure is to determine the ratio of concentration, which in this case is extremely high.

4. This item is also redundant. The recalculated values in the appendix are in terms of metal content in each block and current quotations can be applied.

5. This item is covered in the appendix.

6. Contrary to the~~ir~~ statement, the greater values were found higher on the streams and there is no reason to believe that values would increase downstream.

7. This is simply a matter of opinion not supported by demonstrable facts, and any errors of computation have been eliminated.

8. There is no basis for this statement as the writer did not observe the operation. In the opinion of Bureau of Mines engineers who observed the operation continuously, the jigs were properly and carefully operated.

9. This statement is correct as to the purpose of the exploration. However, the amount of work done permits certain calculations as to available yardage and average value and such information must be considered in determining whether further exploration is justified.

In considering the operator's formal proposal for continuing the exploration into Phase II, several points deserve particular comment. These points pertain to information supporting the operator's claim of important values on certain parts of the property and warrant some analysis.

Item 2 refers to the "High Bar" gravel above Potato Creek and indicates substantial values. The trench excavated during Phase I was dug because of a committed rental of equipment that otherwise would have remained idle. This excavation demonstrated a claim of the existence of high level gravels that had been made previously but had not been verified. At the time the trench was excavated pan samples were taken at bedrock over the entire length of the trench with negative results. A channel sample was taken from the surface to bedrock and concentrated.

Results show less than 1/4 pound of tin per cubic yard and no other values. It is therefore surprising that values claimed by the operator could have been obtained. The circumstances under which this sample was taken indicate the gravel was collected near bedrock, which would be a very poor and unreliable sample at best. The four pans would weigh approximately 50 pounds, from which 34 grams of concentrate was recovered. This represents a ratio of concentration of approximately 800 to 1, which is extremely high. Such a sample has no value in determining the grade of the deposit as it represents nothing in terms of yards of gravel in the deposit.

Similarly, under item 3, a sample taken in Mallory Gulch is less reliable. There is no indication as to where the sample was taken or the weight of concentrates obtained. It is possible to take a so-called sample from either a placer or lode deposit that will show extremely high values but represent nothing other than the content of a very small local concentration or a single specimen that would in no way represent the value of the deposit.

Under item 4 some re-check values are reported, but again there is no data on which to calculate grade. The samples are therefore worthless.

In other items referring to MS-393, 269, 536, 535, Deer Creek, Iron Creek, Nigger, Mallory and Spotted Tail Gulches and Sand Creek, claims are made of previous work having shown certain values, but there are no additional data. Again, the data presented are worthless.

In the investigation of this proposal the areas to be explored were examined by an engineer of the Bureau of Mines and a member of the U. S. Geological Survey. Reports covering these areas are included as a part of this report. A possible method of operation of the higher grade gravels in Bear Creek with estimated costs also is included.

The reject from the composite sample concentrated under Phase I that was retained by the Bureau of Mines was carefully sampled and further concentrated by tabling. The purpose of this was to obtain as high grade concentrate as possible commensurate with good recovery. This concentrate was analyzed by the Salt Lake laboratory of the Bureau of Mines and contained 36.5 percent tin, 1.25 percent tungstic oxide, 3.0 percent tantalum pentoxide, and 2.9 percent columbium pentoxide. Investigations of this product are continuing to determine what percentage of the contained metals can be recovered and at what cost. The results of these investigations will indicate whether the metals can be profitably recovered and whether further exploration is justified.

GEOLOGY

By J. A. Redden

Examinations were made during July 1952 to obtain estimates of available yardage and general character of the gravels.

The high level gravels along Potato Creek were visited and mapped. There was insufficient time to check all possible occurrences of the high level gravels, but those particular gravels included in the applicant's claims on upper Potato Creek contain an inferred tonnage of 500,000 yards. A depth of 12 feet was used for the average depth of the gravels. This depth is based on the limited exposures in old prospect pits and in one new sample trench. This 12-foot depth may be too low since it was impossible to determine the depth to bedrock in the old prospect pits. Also, the one new trench was located on the edge of a small valley and hence its 19-foot depth may have been too low for the average depth of the main terrace gravels. It is possible that the applicant's claim of 1,000,000 yards on the high level terraces may be correct, but there was no evidence observed in the form of known depths to bedrock to

definitely prove this assertion. It is believed that the applicant's estimate is too optimistic and that it would be unwise to infer more than 500,000 yards.

The gravels on Sand Creek were also visited but for the most part the gravels are very shallow - less than 4 feet deep - and the width of the gravels averages only about 70 feet. The extensive length of the claims down Sand Creek establish a fairly large tonnage, but the steep valley sides and configuration of the stream channel would make it very difficult to placer the gravels in any large scale operation.

The gravels on Beaver Creek and Seventy Flats are considerably thicker, ranging from 5 to possibly 12 or more feet in thickness. Also they have a considerably greater width and the more gentle slope of the valley sides would enable a larger scale operation.

The high level placer gravels are composed predominantly of porphyry boulders and pebbles. The gravels on Beaver Creek and Seventy Flats have a higher percentage of pegmatitic and quartzitic material, although they are still predominantly porphyry in composition. A considerable thickness of alluvium is present and clayey and silty layers occur interbedded in all of the gravels.

Since the application was received, a sample from the new trench in the high level gravels on Potato Creek was analyzed by the U. S. Bureau of Mines. The results of this analysis indicate a content of 1/4 pound of tin per yard and traces of columbium-tantalum. This sample was 6 by 12 inches by 19 feet, or 9.5 cubic feet, and was concentrated to 60 pounds. Although it is improper to base too much on one sample, it is believed that the sample is indicative of the values to be obtained from the porphyry-rich high-level gravels.

There is not sufficient reason to believe that the values obtained by sampling of Beaver Creek, Seventy Flats, and of Sand Creek would exceed those found in the sampling in Phase I. The high cost to operate on the narrow, shallow deposits along Sand Creek would preclude a successful operation unless the values were much higher than those in Phase I.

Recommendations

The question of sampling Beaver Creek and Seventy Flats is dependent on the metallurgical results which, in turn, would determine the actual value of the gravels. The value of the samples as set forth by the Johnson report mean nothing unless a high percentage of the values can be recovered in a marketable product. If the metallurgical results are favorable (indicating recoveries of at least 70 percent of the total values), it might be wise to sample Beaver Creek, Seventy Flats, and some of the high level gravels on Potato Creek. If the metallurgical results are not favorable, it is recommended that Phase II be denied. It is recommended that the gravels on Sand Creek should not be sampled under any conditions.

SEVENTY FLATS

An examination of the Seventy Flats area was made on August 7 by R. S. Hill of the Bureau of Mines.

This is one of the properties controlled by the Keenan Properties of Spearfish and a drilling and pitting program here has been included in their submitted request for assistance. It is situated in the Tinton District on Bear Creek at the confluence of Saffron Creek approximately 2½ miles north and east of Tinton and about the same distance down the gulch from the site of the old camp of Beartown at the confluence of Nigger Gulch.

Seventy Flats can be reached by a trail from Beaver Crossing which is on the main Iron Creek road to Tinton. At a small tributary to Saffron Creek a beaver dam has caused an overflow on the trail, making crossing hazardous. This place is only about 1/2 mile from the flats. Also a roundabout trail taking off from the Tinton Boundary Gulch road about 2 miles north of Tinton leads to the Flats. A trail up the creek from the flats to trench 1 of the 1951 work is passable.

The proposed drilling and pitting on Seventy Flats does not appear to be warranted by the facts and the conditions as they were found.

Seventy Flats was the scene of operations many years ago, traces of which are visible. There are the remnants of a dam, a ditch to the plant, and a tailings pile. The ditch runs along a small terrace which has not been worked. The rest of the country looks as if it had been worked and the residue piled up in the aforementioned tailings pile. (A considerable amount of work was done, there is no question about that, but also it may be credited as an enterprise that failed). Above and below the remnants of the old dam are small beaver dams which continue to a point 1/2 mile below trench 1, which was dug last year. From here to and above trench 1 the creek is dry. It is of passing interest to note that the creek starts at a small spring in the bank whose temperature of 46 degrees, said to have been taken by the Fish and Game interests, makes it about the coldest spring around.

No. 1 line of drill holes is proposed at a point about a quarter of a mile downstream from the flat proper. The valley narrows down to a gully some 20 yards wide; the creek flows over bedrock in many places and the gravel appears to be mostly flood wash.

Line of drill holes No. 2 as proposed follows the creek where bedrock is exposed, goes lengthwise along the old tailings pile, and runs out on the terrace where the ditch ended. What pertinent information could be had from this line of holes is not evident.

Line No. 3 crosses the valley about 600 feet above the old dam near the point where the trail from Tinton crosses the creek. There is a high tank on the east side of the creek and there are terrace gravels; the rest of the valley seems to be flood wash.

Line No. 4 is up the creek some 200 yards below trench 1 of 1951. Conditions are similar to those at trench 1; if anything, a little more flood wash. Here the creek is dry. When there were negative results from a trench continuous across the valley, it is doubtful if a line of drill holes could give any more information.

The proposed locations of drill hole lines were established, after consulting the map furnished, by pacing and are subject to error, but it is believed they are fairly close. In any event, the remarks apply as well to the whole valley. The same may be said in regard to the pits which are presumed to corroborate the drill hole findings.

SAND CREEK

On July 28th R. S. Hill of the Bureau of Mines, together with J. A. Redden of the U. S. Geological Survey, made an examination of that portion of Sand Creek covered by the Tantalum, Tin, Tungsten, and Columbium placers of the Keenan Properties. The following day Mr. Hill continued on Sand Creek as far as the Peggy Keenan placer below the falls and also investigated the Madeline claim on Spotted Tail Creek. This was done to determine the practicability of conducting certain sampling tests which have been requested by the Keenan Properties.

It would seem that this request for drilling and pitting is a little premature. Generally speaking, one advances from a prospecting to a development, to an exploitation. The reports submitted have to do with two pans of gravel from Mallory Gulch, which is a considerable distance above the indicated sites. These pans were run down until 90 percent of what was left consisted of the oxides of tin with a small amount of columbium and tantalum oxides, plus .04 milligrams of gold. No mention is made of how much there was in the pan; all we know is that these minerals can be panned in Mallory Gulch. The request submitted says that commercial quantities and yardages (551,000 cubic yards) are indicated. This is highly optimistic. It is doubtful if anything like that yardage is present and, with the exception of the two pans from Mallory Gulch, itself inconclusive, no authoritative data have been submitted giving an idea as to the amount of valuable mineral that might be expected. There are tales of tin and "black stuff" clogging the sluice boxes, but these tales tend to be exaggerated with the passage of time. There may have been a lot of tourmaline; the point is that nobody knows. So far as could be ascertained, there has been no recent prospecting, nothing but the posting of the claim notices. Before a fairly expensive development program is undertaken, it would be advisable to do a little prospecting, trying to determine the presence at some place or other along Sand Creek of mineral content in the tailings residues sufficient to warrant further, more extensive work. We say tailings residues for it must be borne in mind that the entire creek has been washed for gold.

That portion of Sand Creek and Spotted Tail Creek where the claims examined are situated, runs from sections 28 and 29 in a direction west

of north to sec. 6, all in T. 51 N., R. 60 W. in Wyoming, just over the line from Tinton, S. Dak., which is the nearest town. There are old wagon trails down to the creek in many places, but all have been out of use for a long time and are quite impassable. There is one exception to this; an old road has been gone over with a bulldozer which crosses Sand Creek at the foot of Mallory Gulch and leaves Sand Creek at the first gulch from the east downstream. It was not determined where this road comes out, but it could doubtless be made usable in a short time. Otherwise, the nearest one can get is part way down Mallory Gulch to the first old pumping station; thence on foot to the lower pumping station on Sand Creek, and then on down the creek. Occasional cattle trails are a help, but in general it is rough going.

Claim stakes and notices were found on the Tantalum, Tin, Tungsten, Columbium, and Sand Creek placers so that a fair idea is held of where the proposed sampling is to be done. The exact location of two spots, one on the Titanium placer and one on the Sand Creek No. 3, is not known, but can be estimated fairly accurately.

At the spot near the end line of the Tantalum and Tin placers there is a flood deposit of gravel and boulders, having come from both Spotted Tail and Sand Creeks. This deposit seems to be some four feet deep, dropping off abruptly at the lower end. It extends some 100 yards up the creek. At the end line itself the creek flows over bedrock and the material on either side is shallow, 1 to 1½ feet. One could estimate a valley width of 80 yards and an average depth of 5 feet, or 4,000 cubic yards for the Tantalum claim.

Below this spot the valley narrows through the Tin, Tungsten, and Columbium placers in places scarcely wide enough for the creek. A spot

is indicated for a pit sample near the end line of the Columbium and Tungsten claims. This is evidently meant to be on a tiny point where are the ruins of a cabin. There is not enough gravel here to warrant sampling. Above and below the creek narrows and the gravel consists of that small amount in the creek bend where the cabin was built. This has all been washed for gold.

As nearly as could be judged, the spot indicated for drilling near the end line of the Titanium placer is just about where the creek sinks to reappear again some 100 yards above the Falls, nearly 2 miles below. The creek valley here is wider. The whole thing has apparently been washed for gold; boulders are piled up and windrows of material left are now overgrown with trees and vegetation where it is not a flood wash.

From here on down to the Falls the creek has undergone a heavy flood. On either side is a bank from 8 to 12 feet high and between is the dry wash of the creek, fairly level, 200 to 300 feet wide, all boulder gravel. It would appear that a large part of the material here has been swept away.

Below the Falls the valley widens and shows about the same destructive action as evidenced above the Falls. Some of the material swept out above has been caught here, but probably the larger part has been taken on downstream. It would appear that nearly all this area has been washed for gold at some time.

Returning up the creek to Spotted Tail, the place indicated for a shaft or pit is a tailings dump above the mouth of the first draw. Conditions here are similar to those on Sand Creek - every foot apparently has been worked for gold. The left bank is steep, the creek running on bedrock, and the amount of material roughly 1,200 or 1,500 cubic yards.

These creeks were well adapted to small individual workings diverting the creek from side to side and cleaning up the bedrock where most of the gold was found. There does not seem to be sufficient gravel for operation on a large scale. Downstream where the valley is wider a great part of the material has been washed away. The water supply, while sufficient for individual operation, would certainly have to be improved to furnish enough for a larger operation, such as is proposed. At present, while no measurements were taken, it was estimated that below Spotted Tail there is a flow of something like 100 to 150 gallons per minute.

There is insufficient reliable data to warrant the proposed program of drilling and pitting. Should any sampling be done, caution should be taken in case a high concentration is found as this might well be caused by hitting on a spot where the cleaning of old sluices left a concentrate representing an unknown amount of gravel. Results calculated from such a sample would be highly erroneous.

BEAVER CREEK

On August 4 R. S. Hill of the Bureau of Mines visited Beaver Creek in line with the request of the Keenan Properties to have certain sampling done on this creek.

The request asks for three lines of drill holes across the upper valley above Potato Creek at different places. The first just above the mouth of Potato Creek, the second some 1,500 feet upstream, and the third some 2,000 feet above the second. These drill hole samples are to be checked by pit samples, one each at the second and third lines.

It would seem that this amount of work is not warranted by the present known facts. The estimate of yardage in this part of the creek is given in the request as 277,000 cubic yards. The length of 3,508

feet and the average minimum width of 175 feet are reasonable, but the average minimum depth of 15 feet is open to question. Where gravel can be seen along the creek bank there is an overburden of 4 feet and gravel exposed not to exceed 2 feet. This argues an average depth of 9 feet below creek level to bedrock, or 13 feet in case the overburden is not wanted as gravel to be washed as such. It is not known where this figure for average depth was obtained, but it should be taken with caution.

The site of the first proposed line of holes is just above the mouth of Potato Creek. The valley is some 80 yards across. Overburden showing in the creek is 4 feet and gravel visible 1½ to 2 feet. The creek flows over large boulders and it does not appear that it is a great distance to bedrock. There were no signs of old workings seen near this place.

At the approximate site of the proposed second line of drill holes the valley is some 70 yards wide. The depth of gravel is unknown but there is considerable flood wash piled up in the center. The flood wash could hardly be expected to carry much of value.

The third proposed line is taken to be at the lower end of a wider spot in the valley where a draw comes in from the north. Where paced, the valley was 140 yards wide. Some gravel was noted at the creek but there is a considerable overburden on most of the flat.

Above line 3 the valley narrows and the walls become precipitous. This condition holds for 3/4 of a mile when gravels occur and continue for 1/2 mile to the Mathews place, where a dredging operation many years ago ended disastrously.

Between the second and third proposed lines are old workings and above the third line is an old ditch above the road. Bonanza Gulch, a small tributary from the north, was not visited. It was noted that the amount of old workings on Beaver Creek was very small as compared to other parts of the district. It is evident that the reason for this is that little pay was found. The gold sought at that time and the tin and associated metals now being sought very probably have a common origin so that without one you could not expect to find the other.

Below Beaver Crossing there is a large flat, formerly covered by beaver dams. The measurements, as given in the request as 10,062 feet by 300 feet average seem all right. It is not known where the figure of 15 feet for average depth was obtained. It might have come from the pits which were almost completed in 1952. In retrospect it seems a pity that these were not finished when they were so well along toward completion. There is bedrock showing on the pile taken out so that a cut was certainly made to bedrock. There is naturally a greater proportionate amount of upper than lower gravel so that a perfectly true sample cannot be hand, but by cutting and quartering an amount of half a yard could be obtained, the panning of which would tell whether or not some values existed even if it did not tell the exact amount.

It hardly seems reasonable to suppose that at this place below Upper Beaver where little has been found and below Potato Creek where the work of last year showed meagre possibilities, there should be found a concentration rather than a dissemination.

It is believed that the present available knowledge does not warrant the proposed extensive program of drilling and pitting on Beaver Creek.

POSSIBLE METHOD OF OPERATION AND ESTIMATED COSTS

R. S. Hill

In the work on the Keenan Properties in the Tinton District, Potato Creek gave negative results. It is quite evident that there is no chance for a profitable operation on this creek.

The results from the sampling of Bear Creek gave a combined value of $2.15 per cubic yard after a judicious weighing of the different factors. This would be very interesting were the values entirely in gold. The treatment would be relatively simple, loss very low, and the product immediately marketable. However, the gold forms a part only of the contained values. There was a time when large dredges operating on deep gravels washed gold at a profit out of very lean gravels, but at the present time this class of large operation demands 25 cents a cubic yard to pay operating expenses without amortization of equipment. On a small operation (such as that proposed on Bear Creek), the gold recovery could not be figured as profitable in itself but as an addition toward paying the expenses of the entire operation.

Tungsten is reported as being found in the concentrates. Were this in the form of wolframite, which is magnetic, a separation would be easily effected, but what little tungsten is present is in the form of non-magnetic scheelite. Whether or not this tungsten can be recovered from the concentrate economically is a problem, but it is certain that the cost would be considerable, and inasmuch as it occurs in such a small amount, we would be justified in eliminating it from further consideration.

We have, then, a deposit containing tin, columbium, tantalum, and gold. The amount of tin and columbium-tantalum contained is low, in the

neighborhood of 0.7 pound per cubic yard. Now in the Malay tin fields where operations are on a large scale, the content of the gravels varies from 5 to 60 pounds of tin stone per cubic yard. Concentration is in the ratio of around 100 to 1 and labor is cheap as compared to here. Nor is there any better efficiency in the labor here; on this class of work the balance is in favor of the coolie labor.

In the general operation of a placer deposit an ample supply of water is of the greatest importance. In the deposit under study there are four winter months when working is not possible. There are two months in the spring when the snow run-off makes water available and six months of a constantly decreasing supply. Storage of water is then necessary if an operation is to run steadily except in the winter. The question then arises as to where.

The normal way of working a placer deposit is to start at the lower end and work upstream, thus avoiding spreading tailings over ground not worked. Were it possible to impound water from the run-off somewhere in the upper reaches of the Bear Creek system, it could then be piped and by gravity flow arrive where needed. However, there is no basin or place in upper Bear Creek or its tributaries where any amount of water could be caught. The valley simply narrows all the way up. The only place where an appreciable amount could be stored is in the neighborhood of Seventy Flats. Here a dam could be built that would hold a reasonable quantity of water. The remains of a former dam are here about half way up the flat. This could be utilized but it would not hold as much as one farther down the creek where the valley begins to narrow.

In any case, if operations were commenced somewhere in the vicinity of trench 1, it would entail pumping water a distance of about a mile,

which distance would gradually increase to 3 miles as work progressed up the creek.

There is one drawback to this scheme and only trial could determine how serious it would be. This lies in the fact that there will be practically no fresh water continually added, all the tailings will go down the creek, and eventually settle in the dam basin. The basin could be cleaned out in the fall with a dragline, but it is not known how much this constant reusing of water would hamper operations. In any case, the cleaning out of the basin would involve handling of a part of the material a second time while during a certain period of each day washing would be carried on with water already holding its full load in suspension. A pump adapted to this class of work would be necessary.

The question arises then, is it not possible to build a dam on another creek? The answer is that Beaver Creek at the lower end of Beaver Crossing presents that possibility. This whole flat was formerly covered by beaver dams and a dam at the lower end could impound an ample water supply. A dam some 50 yards long and 7 yards high would back up the water some 300 yards. The distance to be pumped would be approximately the same as from Seventy Flats, but there is a divide to be crossed at least 300 feet high, which would increase the pumping cost and call for relief valves in the installation.

The cost of either of these dams, as well as the pumping charges, would have to be charged against the 214,594 yards of gravel available on Bear Creek.

This is postulated on the fact that the Potato Creek gravels gave negative results and those in Bear Creek are the only ones in any way worthy of consideration.

A dam 50 yards long, 7 yards high, 4 yards wide on top with a front slope 3:1 and back slope 2:1 would contain 7,525 yards of material. At 10 cents a yard, plus a reasonable cost for gates and cement work on the spillway, would mean a $3,250 cost against 214,594 yards of gravel, approximately 1½ cents a yard. Three-inch pipe at $1.00 a foot, a pump, high pressure type, a source of power, and installation would amount to 20¢ per yard. Add 5 cents for an operator and supplies and water would cost 25¢ a yard on a 200-yard per day basis. Portability is essential for an installation designed to treat gravel in a narrow valley. A portable installation to handle gold gravels was used some years ago in Colorado and the cost was said to have been around $30,000. At the present time an installation designed to handle the products in the Bear Creek gravels would cost around $50,000, a charge of about 23¢ a yard. This charge could be reduced were other gravels to be developed, but at present the only ones definitely known are on Bear Creek. Those on Potato Creek are eliminated by the sampling results. We have, then, a charge of 48 cents a yard, which the cost of power installation for the pump would bring up to 50 cents a yard against this body of gravel before the beginning of operations.

Turning now to the cost of operations, it would be possible to make an estimate, based on the number of men necessary, the cost of machinery here, cost of supplies, supervision, and all the many things entering into the operation, but if it costs 25 cents a yard to operate on a large scale, then a small operation would cost as much again per unit and this when operating for gold alone.

We have then a cost of $1.00 per yard against the gravel, the value of which from the calculated average grade is $2.15, including 31 cents

for gold. This would mean a profit of $1.15 per yard were it possible to extract all the values in the same proportion as the gold and for the same cost. While all the gold cannot be recovered, it may be considered as recoverable for all practical purposes of making an estimate. However, such is by no means the case with the other metals. In the Malay states the percentage unrecovered runs from 15 to 20 percent. While this may arise from different causes, yet it is a loss that is recognized. Again, these operations are for tin alone. A certain small amount of wolframite (tungsten) found with the tin is separated magnetically.

The product which will be obtained here will be a mixture of columbium-tantalum, tin stone and tungsten mineral. Perhaps a market can be found for this kind of a product, but it is not to be expected that the full price for each contained metal can be obtained. Even if such were the case, we would still have a return at the utmost of $1.78 per yard and not $2.15. Were the price of the composite concentrate to be cut only 10 percent to cover the cost of separation, then the returns would be 31 cents gold plus $1.32 cents other metals, equaling $1.63 per yard. It is believed that a 50 percent recovery of these metals will be closer to reality than an 85 percent recovery, which would result in a profit of 4 cents per yard.

The foregoing has not taken into account the extra work entailed in treating this low-grade gravel. Referring, at the risk of boredom, again to the Malay fields where the content is from 5 to 60 pounds of tin per cubic yard, the final product represents a concentration of roughly 100 to 1. The contents of the Bear Creek gravels being far lower than the minimum above mentioned, a similar product would represent a concentration of over 500 to 1.

The specifications on which these strategic minerals are purchased are such that a marketable concentrate will consist of the metal-bearing minerals and little else. It is readily seen that the high ratio of concentration mentioned above is essential to obtain a marketable product.

The above is a rapid resume of the situation at the Keenan placers; while there are doubtless other costs not included, yet enough has been said to show that any sizeable operation is believed to be doomed to failure; under the existing conditions the low grade gravel found here cannot be exploited at a profit; instead a loss is bound to be experienced.

Could it be worked individually on a small scale? Not under present conditions, the cost of labor being what it is. A small machine, say a "Pay Loader," large enough to handle the type of material encountered would cost in the neighborhood of $5,500 and be idle most of the time. A daily amount of 6 to 8 yards is all that can be run through a sluice box. This would require two men and the possible returns would not make it attractive. Then again, a certain amount of time would be necessary to concentrate the sluice box product in a Joplin jig or similar arrangement after the gold had been taken out. There would not seem to be a chance for a profitable operation that entailed the hiring of labor. The placer mining in the Tinton district has been done by those working on their own time and content with a small return when buoyed up by the hope of an occasional nugget.

Since it has been shown that an operation in Bear Creek cannot be conducted at a profit, the question arises: is there another place in the vicinity which offers better prospects?

The first exploratory work was done on Potato and Bear Creeks as these creeks seemed to offer the best chance for success. Potato Creek turned out to be negative and Bear Creek, while not negative, was found to be of too low a grade to be profitable. Work on lower Bear Creek is not indicated as it is just that much farther from the original source and certainly could not be expected to be any richer. The same reasoning applies to Beaver Creek into which Potato Creek flows. There is very little gravel in Mallory Gulch at the head of which was the mill which burned. It would be quite possible in this gulch to pan out some tin or columbite, but it is equally possible that it came from the old mill and in any case, it would tell little.

To date there has been nothing definite from any of these creeks, such as how large was the sample panned, where and how was it taken, by whom, was it from bedrock or representative of the entire mouth cover? In short, it may be said that the only information so far available is rumor and bunkhouse tales. Also, Mallory Gulch has been entirely turned over in looking for gold.

The different places indicated for exploratory work in the application for Phase II have been gone over and it can be said that there is not one of them which would seem to offer a chance for success.

In the district a certain amount of work has been done at those places which were most promising and the results obtained were negative. Now it is proposed, as Phase II, to put in three times as much money searching in other places which are much less promising. It is difficult to see any merit in such a proposal.

APPENDIX

This appendix is a recalculation of yardages and average grades in Potato and Bear Creeks, based on average values as shown in the Walter W. Johnson Company report, widths of gravels sampled, and distances between trenches as determined by a steel tape and compass survey made in July 1952.

The average grade per square foot of bedrock is taken from the Johnson report, which was calculated from the sample data collected during the exploration and analyses provided by the operator.

The methods of calculating values are somewhat different than those used by Johnson, but it is believed that these values more equitably distribute the values over the entire area sampled. Further calculations can be made using a cut-off value that would appreciably reduce the yardages that might be profitable. It is not believed that this refinement is necessary at the present time.

AVERAGE GRADE PER SQUARE FOOT OF BEDROCK

Trench	Gold Dollars	Tin Pounds	Columbite-tantalite Pounds	Tungsten Pounds
1	$0.02	.086	nil	nil
2	0.16	.082	nil	nil
3	0.102	.107	.026	nil
4	0.055	.083	.205	nil
5	0.029	.085	.031	nil
6	0.02	.036	nil	.0018
7	0.041	.02	nil	nil
8	0.069	.094	.07	.0045
9	0.096	.028	nil	nil

BEAR CREEK

Block 1

Trench 1 to Trench 2

Trench 1 - Width, 140 feet
Depth, 10 feet
Cross sectional area, 155.5 sq. yds.

Trench 2 - Width, 95 feet
Depth, 4.02 feet
Cross sectional area, 42.5 sq. yds.

Average width, 117.5 feet
depth, 7.01 feet
Cross sectional area, 91.1 sq. yds.

Length, 2,524 feet or 841 yards

Area, 32,799 sq. yds.
Volume, 76,615 cu. yds.

Because of the low values in trench 1 the block is not extended downstream from that trench.

Evaluation

Gold

Trench	Value or pounds per sq. ft. bedrock		Cross-sectional area		Product
1	$0.02	X	155.5	=	3.11
2	$0.16	X	42.5	=	6.80
			198.0		9.91

$\frac{9.91}{198}$ = $0.05 per sq. ft. of bedrock

$0.05 X 9 X 32,799 = $14,309.55, total gold value

Tin

1	.086	X	155.5	=	13.37
2	.082	X	42.5	=	3.48
			198.0		16.85

$\frac{16.85}{198}$ = .084 lbs. per sq. ft. of bedrock

.084 x 9 x 32,799 = 24,796 lbs. total tin in block

No other values.

Block 2

Trench 2 to Trench 3

Trench 2 - Width, 95 feet
Depth, 4.02 feet
Cross sectional area, 42.5 sq. yds.

Trench 3 - Width, 105 feet
Depth, 5.5 feet
Cross sectional area, 64.2 sq. yds.

Average Width, 100 feet
Depth, 4.76 feet
Cross sectional area, 53 sq. yds.

Length, 1,187 feet or 395.7 yards

Area, 13,176.8 sq. yds.
Volume, 20,972 cu. yds.

Evaluation

Gold

Trench	Value or pounds per sq. ft. bedrock		Cross-sectional area		Product
2	0.16	x	42.5	=	6.80
3	0.103	x	64.2	=	6.61
			106.7		13.41

$\frac{13.41}{106.7}$ = 0.125, average value per sq. ft. bedrock

$0.125 x 9 x 13,176.8 = $14,823.90, total gold value

Tin

2	0.82	x	42.5	=	3.48
3	0.107	x	64.2	=	6.87
			106.7		10.35

$\frac{10.35}{106.7}$ = .097 lbs. per sq. ft. bedrock

.097 x 9 x 13,176.8 = 11,503.34 lbs., total tin content

Columbite-tantalite

2	nil	x	42.5	=	0
3	0.26	x	64.2	=	1.67
			106.7		1.67

$\frac{1.67}{106.7}$ = .016 lbs. per sq. ft. bedrock

.016 x 9 x 13,176.8 = 1897.45 lbs. total columbite-tantalite content

Block 3
Trench 3 to Trench 4

Trench 3 - Width, 105 feet
Depth, 5.5 feet
Cross sectional area, 64.2 sq. yds.

Trench 4 - Width, 102 feet
Depth, 3.1 feet
Cross sectional area, 35.1 sq. yds.

Average Width, 103.5 feet
Depth, 4.3 feet
Cross sectional area, 49.45 sq. yds.

Length, 2,567 feet, or 855.7 yards

Area, 29,522 sq. yds.
Volume, 42,314 cu. yds.

Evaluation

Gold

Trench	Value or pounds per sq. ft. bedrock		Cross-sectional area		Product
3	0.103	x	64.2	=	6.61
4	0.055	x	35.1	=	1.93
			99.3		8.54

$\frac{8.54}{99.3}$ = 0.086, average value per sq. ft. bedrock

$.086 x 9 x 29,522 = $22,850.03, total gold value

Tin

3	0.107	x	64.2	=	6.87
4	0.083	x	35.1	=	2.91
			99.3		9.78

$\frac{9.78}{99.3}$ = .098 lbs. tin per sq. ft. bedrock

.098 x 9 x 29,522 = 24,709.9 lbs. total tin content

Columbite-tantalite

3	.026	x	64.2	=	1.67	1.67
4	.205 .027	x	35.1	=	7.19	1.02
			99.3		8.86	2.69

2.69 ~~$\frac{8.86}{99.3}$~~ = ~~.089~~ .027 lbs. per sq. ft. bedrock

~~.089~~ x 9 x 29,522 = ~~23,647.1~~ lbs. total columbite-tantalite content

.027 x 9 x 29,522 = 7,173.8

Block 4

Trench 4 to Trench 5

Trench 4 - Width, 102 feet
Depth, 3.1 feet
Cross sectional area, 35.1 sq. ft.

Trench 5 - Width, 124 feet
Depth, 3.6 feet
Cross sectional area, 49.6 sq. yds.

Average Width, 113 feet
Depth, 3.35 feet
Cross sectional area, 42.35 sq. yds.

Length, 5,291 feet or 1763.7 yards

Area, 66,491.5 sq. yds.
Volume, 74,693.7 cu. yds.

Evaluation

Gold

Trench	Value or pounds per sq. ft. bedrock		Cross sectional area		Product
4	0.055	x	35.1	=	1.93
5	0.029	x	49.6	=	1.42
			84.7		3.35

$\frac{3.35}{84.7}$ = $0.04, average value per sq. ft. bedrock

$0.04 x 9 x 66,491.5 = $23,936.94, total gold value

Tin

4	0.083	x	35.1	=	2.91
5	0.085	x	49.6	=	4.22
			84.7		7.13

$\frac{7.13}{84.7}$ = .084 lbs. tin per sq. ft. bedrock

.084 x 9 x 66,491.5 = 50,267.57 lbs. total tin content

Columbite-tantalite

4	.205	x	35.1	=	~~7.19~~	1.02
5	.031	x	49.6	=	1.54	1.54
			84.7		8.73	2.56

$\frac{2.56}{84.7}$ ~~$\frac{8.73}{84.7}$~~ = ~~.103~~ .0302 lbs. per sq. ft. bed rock

~~.103~~ .0302 x 9 x 66,491.5 = ~~61,637.6~~ 18,072.4 lbs., total columbite-tantalite content

Block is not extended upstream above trench 5 because creek narrows and no gravel available.

POTATO CREEK

Block 6

Trench 6 to Trench 7 plus 800 feet upstream from trench 6 and less 700 feet worked by Driskill

Trench 6 - Width, 100 feet
Depth, 4.6 feet
Cross sectional area, 51.1 sq. yds.

Trench 7 - Width, 75 feet
Depth, 4.6 feet
Cross sectional area, 38.3 sq. yds.

Average Width, 97.5 feet
Depth, 4.6 feet
Cross sectional area, 44.9 sq. yds.

Length, 2,172 feet or 724 yards

Area, 21,119 sq. yds.
Volume, 32,508 cu. yds.

Evaluation

Gold

Trench	Value or pounds per sq. ft. bedrock		Cross sectional area		Product
6	.02	x	51.1	=	1.02
7	.04	x	38.3	=	1.53
			89.4		2.55

$\frac{2.55}{89.4}$ = $0.029 average value per sq. ft. bedrock

$.029 x 9 x 21,119 = $5,512.06, total gold value

Tin

6	.036	x	51.1	=	1.84
7	.02	x	38.3	=	.77
			89.4		2.61

$\frac{2.61}{89.4}$ = .029 lbs. tin per sq. ft. bedrock

.029 x 9 x 21,119 = 5,512.1 lbs., total tin content

No other values

Block 7

Trench 7 to Trench 8

Trench 7 - Width, 75 feet
Depth, 4.6 feet
Cross sectional area, 38.3 sq. yds.

Trench 8 - Width, 40 feet
Depth, 5.8 feet
Cross sectional area, 25.8 sq. yds.

Average Width, 57.5 feet
Depth, 5.2 feet
Cross sectional area, 33.2 sq. yds.

Length, 750 feet or 250 yards

Area, 4,792.5 sq. yds.
Volume, 8,300.0 cu. yds.

Evaluation

Gold

Trench	Value or pounds per sq. ft. bedrock		Cross sectional area		Product
7	.04	x	38.3	=	1.53
8	.069	x	25.8	=	1.78
			64.1		3.31

$\frac{3.31}{64.1}$ = .052, average value per sq. ft. bedrock

$.052 x 9 x 4,792.5 = $2,242.89, total gold value

Tin

7	.02	x	38.3	=	.77
8	.094	x	25.8	=	2.43
			64.1		3.20

$\frac{3.20}{64.1}$ = .05 lbs. tin per sq. ft. bedrock

.05 x 9 x 4,792.5 = 2,156.6 lbs., total tin content

Columbite-tantalite

7	0	x	38.3	=	0
8	.07	x	25.8	=	1.81
			64.1		1.81

$\frac{1.81}{64.1}$ = .028 lbs. columbite tantalite per sq. ft. bedrock

.028 x 9 x 4,792.5 = 1,207.71 lbs., total columbite-tantalite content

Block 8

Trench 8 to Trench 9 plus 450 feet downstream

Trench 8 - Width, 40 feet
Depth, 5.8 feet
Cross sectional area, 25.8 sq. yds.

Trench 9- Width, 135 feet
Depth, 4.6 feet
Cross sectional area, 69.0 sq. yds.

Average Width, 87.5 feet
Depth, 5.2 feet
Cross sectional area, 50.5 sq. yds.

Length, 2,674 feet or 891 yards

Area, 25,982 sq. yds.
Volume, 44,996 cu. yds.

Evaluation

Gold

Trench	Value or pounds per sq. ft. bedrock		Cross sectional area		Product
8	.069	x	25.8	=	1.78
9	.096	x	69.0	=	6.62
			94.8		8.40

$\frac{8.40}{94.8}$ = .089, average gold value per sq. ft. bedrock

$.089 x 9 x 25,982 = $20,811.58, total gold value

Tin

8	.094	x	25.8	=	2.43
9	.028	x	69.0	=	1.93
			94.8		4.36

$\frac{4.36}{94.8}$ = .046 lbs. per sq. ft. bedrock

.046 x 9 x 25,982 = 10,756.5 lbs., total tin content

Columbite-tantalite

8	.07	x	25.8	=	1.81
9	0		69.0	=	0
			94.8		1.81

$\frac{1.81}{94.8}$ = .019 lbs. per sq. ft. bedrock

.019 x 9 x 25,982 = 4,442.9 lbs., total columbite-tantalite content

SUMMARY

Block	Cubic Yards	Total Gold Value	Total Tin Content, Pounds	Total Columbite-Tantalite Content, Pounds
1	76,615	$14,309.55	24,796.0	--
2	20,972	14,823.90	11,503.3	1,897.45
3	42,314	22,850.03	24,709.9	23,647.10
4	74,693	23,936.94	50,267.6	61,637.60
Total Bear Creek	214,594	65,920.42	111,276.8	~~87,182.15~~

7,173.8
18,072.4
27,144

27,144 x 3 = $81,432

$291,997.4 =

Average per cubic yard:
- Gold - $0.~~31~~.354
- Tin - .518 lbs.
- Columbite-tantalite - .~~406~~ .126 lbs.

6	32,508	5,512.06	5,512.1	--
7	8,300	2,242.89	2,156.6	1,207.7
8	44,996	20,811.58	10,756.5	4,442.9
Total Potato Creek	85,804	28,566.53	18,425.2	5,650.6

Average per cubic yard:
- Gold - $0.~~33~~
- Tin - 0.215 lbs.
- Columbite-tantalite - 0.~~0659~~ lbs.

Grand Total	300,398	$94,486.95	129,702.0	~~92,832.75~~ 98,384

Average per cubic yard:
- Gold - $0.314
- Tin - 0.432 lbs.
- Columbite-tantalite - 0.309 lbs.

Value per cubic yard:
- Gold - $35 per oz.
- Tin - $1.21 per lb.
- Columbite-tantalite - $3.00 per lb.

Both

	Bear Creek		Potato Creek
Gold	0.354	$0.31	$ 0.33
Tin	0.627	0.62	0.26
Columbite-tantalite	0.379	1.22	0.20
	$1.360	$2.15	$ 0.79

98384 00
359,811 or 1.20/yd.

Average all deposits:
- Gold - $ 0.314
- Tin - 0.522
- Columbite-tantalite - $ 0.~~927~~
- $ 1.763

Bear Creek Recoverable values.

cts./cu.yd.		%		#
0.354	x	80	=	0.283
0.627	x	75	=	0.470
0.379	x	50	=	0.190
				# 0.943

144 WA MP /I-BOM/

MINNEAPOLIS MINN 9-18-52 105P

PAUL ZINNER, CHIEF

MINERALS DIV, BUR OF MINES, INTERIOR BLDG., WA

REURTEL KEENAN REPORT. WILL AIRMAIL TO DMEA SEPT. 22.

PAUL T.ALLSMAN, BUR OF MINES, MINNEAPOLIS

CFN DHEA 22

AM 105P

SEP 19 9 25 AM '52
BUREAU OF MINES
MAIL ROOM
WASHINGTON, D. C.

RECEIVED
SEP 19 1952
BUREAU OF MINES
MINERALS DIVISION

9/19/52 gla

MUNITIONS BOARD
WASHINGTON 25, D. C.

MBMMA

17 September 1952

Dear Mr. Ellis:

Confirming our recent phone conversation regarding the Keenan Properties in South Dakota, we would appreciate it very much if you would furnish us with a brief chronological outline of all action taken to date by your agency on this subject.

Two points in particular that we would like some clarification on are, (a) the variance between the Bureau's and Keenan reports on the values of 62 cents and $1.54 per cubic yard of placer material, and (b) the objections raised by Keenan Properties as to how the second phase is to be carried out, whether in placer or hard rock pegmatite deposits.

Sincerely yours,

Edwin J. Lintner
Chief, Additive Alloys Division
Office of Materials

Mr. Ernest W. Ellis
Chief, Rare & Miscel. Metals Division
Defense Minerals Exploration Administration
Room 4640, New Interior
Washington 25, D. C.

Code 12
Ext. 71

Mr. Ellis discussed this letter over the phone with Mr. Lintner

9/10/52 - gla

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~
Region V
2906 Golfax Avenue South
Minneapolis 8, Minnesota

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 10 1952

September 8, 1952

Memorandum

To: Donald H. Mullen, Supervising Engineer, Bureau of Mines, School of Mines Campus, Rapid City, South Dakota

From: Executive Officer, Field Team, Region V

Subject: Docket DMEA-654x, Contract Idm-E58
Keenan Properties, Inc.

Reference is made to your transmittal on August 20, 1952, of a preliminary report on the feasibility of Phase 2 of the subject docket project, which was to satisfy the requirements until a more comprehensive report could be assembled.

We would appreciate all you can do to expedite this detailed report referred to.

A. R. Needham
Executive Officer
Field Team, Region V

ARNeedham:dg
cc Dutton
Hoddam
DMEA (Wash)
Region V
files
df

9/4/52 gla

KEENAN PROPERTIES, ~~INC.~~

SPEARFISH, SOUTH DAKOTA

TIN
COLUMBIUM-TANTALUM
TUNGSTEN
GOLD

c/o Wm. C. Broadgate
Suite 421, Tower Bldg.
Washington, D. C.

TELEPHONE
SPEARFISH 2F14

August 31, 1952

Defense Minerals Exploration Administration
Department of the Interior
Washington 25, D. C.

Attention:
Mr. Ernest Ellis
Chief of Rare and Miscellaneous Metals

Dear Mr. Ellis:

In considering documents and information necessary for use for Form MF100, the Applicant, Keenan Properties, Docket 654X, has assembled data which may be pertinent to the immediate consideration being given to the Proposal, Phase 2, DMEA, Contract E58.

The following documents have been sent under separate cover:

1. MF100
2. Information Supplementary to MF100.
3. Wm. C. Broadgate's recommendations, supplementary to his report.
4. USGS Geological Outline of Area (922T)
5. Conner's Ground (now K.P.) Report Condensed (1904)
6. Reference to Taggart's listing of Fansteel Metallurgical Co.'s 1937 recovery, and flow sheet of separation of Columbium-Tantalum-Tin-Tungsten concentrates (From area now under K.P. control).
7. Table of Ratio of Metals based on check assays (Checking Oscar N. Bribach's assays).
8. Pilot Plant Recovery and Costs 1949.
9. Pilot Plant Work Sheet, (Pan American Rougher Concentrate and Denver Mineral Jig Product 1949).

Yours very truly,

Peggy Keenan

Peggy Keenan
d/b/a/ Keenan Properties

Form MF-100
(May 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

GENERAL TECHNICAL DATA FOR USE UNDER THE DEFENSE PRODUCTION ACT OF 1950

NOT TO BE FILLED IN BY APPLICANT

Docket No. _____

Date received _____

Name and address of applicant

Date _____

INSTRUCTIONS

This form is to be filed with Defense Minerals Administration, Department of the Interior, Washington 25, D. C. It should be accompanied by appropriate application form when a specific type of Government assistance is requested, in the form of (1) loan, (2) purchase contract, (3) Government guarantee of a private loan, (4) priorities or allocation of mining equipment, and maintenance, repair and operating supplies, and (5) other forms of Government assistance that might arise under the Act. Submit four (4) signed copies of the form and accompanying papers. Name and address should be stamped or typed on each sheet of this form and all accompanying papers. *When a question is inapplicable it should be so stated on the form.* Additional sheets may be attached in answering any questions or in supplying additional information. (IF YOU CANNOT ANSWER A QUESTION, SO STATE.) If a question is answered elsewhere indicate where answered. It is not necessary to answer it again.

GENERAL TECHNICAL DATA

Supply the following information on separate sheets, arranged, numbered, and lettered as indicated:

1. Materials produced:
   (*a*) What are the chief mine, mill, or smelter products?
   (*b*) What are the byproducts, if any?
2. Name(s) and type(s) of mine(s), mill(s), smelter(s), refinery(ies), pit(s), quarry (ies), drilling operation(s). Include old names of property, if any. Show extent of workings, including the following:
   (*a*) Linear feet of shafts.
   (*b*) Linear feet of drifts and crosscuts.
   (*c*) Linear feet of tunnels or adits.
   (*d*) Linear feet of other mine openings (explain briefly).

   Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity.
3. For each operation listed above supply the following:
   (*a*) Distance and direction from nearest town and shipping point.
   (*b*) Mining district.
   (*c*) Township, Section, Range.
   (*d*) County, State.
4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated.
   (*b*) Are you operating this property as:
   - ☐ Owner.
   - ☐ Lessee.
   - ☐ Contractor.
5. Number of years in production _____

   If not in production or operation, estimated date when production will begin _____
6. Experience of operators:

   Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who manage the project.
7. History:
   (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for suspension of operation.
   (*b*) State briefly the known history and production of adjoining and neighboring properties.
   (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

GENERAL TECHNICAL DATA

KEENAN PROPERTIES, DOCKET 654X

SUPPLEMENTARY TO FORM MF-103

1. Materials produced:

(a) The chief products from the Placer Gravel deposits are:

Columbium
Tantalum
Tin
Tungsten
Gold

(b) The by-products are: (10-30 mesh)

Hematite
Ilmenite
Limonite
Magnetite
Garnet

2. Keenan Properties Co. is the firm name.

Placer deposits (also lode claim ore deposits.)

The Mill building was operated only for processing concentrates from Keenan Properties gravel testing pilot plant 1948, 1949. (The mill was built by Dakota Tin and Gold Co. for treatment of feldspar, was not operated.)

The workings prior to 1947 by Dakota Tin and Gold, Conners' Tin Co., etc., were exploratory and no production was accomplished due to low prices and the death of Mr. Conners by drowning.

(a) There is a 2 compartment shaft 8' x 20' x 135' under the mill. The shaft passed through a tungsten ore deposit reportedly for 70'. Another shaft on the south hill is 60' deep on a feldspar-tin ore dike.

(b) At the bottom of the 135' shaft, there is a cross cut 150' passing through a feldspar-tin vein.

(c) The tunnel is 292' on the 60' level in feldspar-tin ore. In early days 5 tons of tin ore were shipped to the Pengels Smelter, assayed 15% tin. In 1948 Keenan Properties re-opened the tunnel and explored the feldspar-tin ore veins.

(d) There is a 60' shaft on a gold vein 100' from the 135' shaft. The gold ore reportedly assayed $60 a ton. The 135' shaft and the 150' cross cut are flooded.

3. (a) The above deposits are approximately 14 miles from Spearfish, South Dakota. The RR loading platform is 15 miles distant at Cheyenne Crossing on the Chicago and Northwestern R.R.

(b) Rawlins Mining District.

(c) T5 R1E, Sections 7, 8, 9, 10, 16, 17, 18, 19, 20, 21, 29, 30.

(d) Lawrence County, South Dakota.

4. (a) The property is in process of exploration and development.

(b) The properties are controlled by mining leases, the leases are owned by Keenan Properties Co., and are held by advance royalties paid.

5. There has been a pilot plant recovery only in stream gravel. An average of 100 or more assays: Tin 30%, Columbium-Tantalum 8-10%, Tungsten 3-7%, plus 14 oz. gold per ton of concentrates. Production is expected this year in September 1952 on the properties explored by Dmea Project Idm-858 in 1951.

6. The president and Resident Manager has for 4 years been consolidating and exploring the properties in conjunction with associates and engineers. Previous experience of operator; co-invented and developed plastic flooring and ships' decking. Spent childhood with father developing copper and oil properties. Seven years successful career in radio broadcasting - NBC, CBC, Mutual. The operator has for 4 years supervised the exploration and development of the Placer deposit by pilot plant operation, testing, engineering, assaying, and the 1951 DMEA testing and engineering work.

7. History:

(a) The underground exploration and gold panning in the streams began when the initial gold rush to the area was in progress. A group of hard rock miners and associates (Dakota Tin and Gold Co., Connors Tin Co., Bear Gulch Mining Co.) explored the above described placers, shafts, tunnels, and many discovery holes on feldspar-tin ledges, gold veins and in the adjoining properties - Columbium-Tantalum and Lithium from Spodumene. World War II and lack of capital interferred with operation or production. From 1931-1943 W. C. Driskill, engineer, explored the stream gravel deposits with small equipment. He recovered tin in commercial quantities,

columbium-tantalum, gold, for Fansteel Metallurgical Co. In 1947 he was engaged to re-check the deposits for Keenan Properties and the report was submitted to General Services Administration.

Beginning 1900-1904, Milton Connors explored 500 acres now leased to Keenan Properties. About $100,000 was expended on shafts to 75' depth, inclines and discovery holes. Many of these dumps were checked by Keenan Properties in 1951 as well as the Florence properties. Some of the samples were sent to Oscar M. Bribach, Aurora, Colorado. A spectograph of the Florence properties indicated beryllium, tin, and rutile (titanium) and feldspars. The College Park Laboratory of the Bureau of Mines preliminary analysis (1952) reports mica, quartz, feldspar, and the heaviest showing of cassiterite on the Elisabeths and Connors.

In 1949 a 4' talc ledge was discovered. An analysis showed 1.1% Columbium per ton of ore. The exploration indicated the ledge widens to 9' and assays .5% tin, .07 oz. gold per ton.

A preliminary exploration of an 80' cut on the Florence properties in 1951 indicated beryllium and rutile (titanium). The High Bar gravel placers deposited by a pre-historic river, was excavated to a depth of 19' in 1951, assayed as follows: (4 pans gravel near bedrock concentrated to 34 grams.)

Au (mg)	WO_3%	Cb_2O_5%	Ta_2O_5%	Sn %
0.44	.01	2.7	1.4	4.5

In 1949 gravels were explored by a pilot plant operation and confirmed a re-check of values by W. C. Driskill 1949 values. The cost of this exploration was $30,000. (See attached report)

(b) The Black Hills Tin Co. adjoining Keenan Properties has reportedly spent large sums of money on exploration, roads, a small town, high line, water systems, and mills. They recovered lithium, columbium, feldspar and tin.

The Homestake Mine is 8 miles East.

The Mineral Hill Gold Property adjoining Keenan Properties built a gold mill near Welcome. The death of the owner stopped further exploration.

Reportedly 5 million in gold was recovered in nuggets from surface panning of gravels, now a part of Keenan Properties, but scientific recovery was not instituted. Tin and columbium was present in commercial quantities in the discarded gravel. Low prices and lack of modern processes made recovery unattractive.

(c) See attached reports:

W. C. Broadgate
W. C. Driskill
Faustcal Metallurgical Co. Data
Karl W. Ammudson, Engineer
Pilot Plant Report and Work Sheet
Photostats of "Ratio of Tin to Tungsten"

Refer to the following Government documents re the Keenan Properties:

U.S. Bureau of Mines I.C. 6846, 7013, 6786, p. 20.

U.S.G.S. Bulletins 9227, p. 597, 599, 606, 607, 610, 612, 613, 616, and 627.

U.S. Bureau of Mines Report R.I. 4484, p. 7.

8. (a)

(1) Refer to W. C. Broadgate report.

(2) Refer to Map "A" with Phase 1 area in green, Phase 2 area in red.

W. W. Johnson data and maps.

W. C. Driskill data and maps.

(3) The gravel is a mixture of fine and medium with approximately 70% minus 4", and less than 1% boulders of from more than 12" diameter. The gravel is loose and easily worked, contains some stumps and trees.

(4) The bedrock is mainly decomposed schist and porphyry. It is soft and can be cut 6" - 12" with a bulldozer, where important values are found. The bedrock is rolling.

(5) Overburden is loose, medium-fine material, free from clay, varying from 6" to 4' in depth, and totalling approximately 4% of Phase 1 gravels. (4% of 500,000 cubic yards or 20,000 cubic yards). The overburden estimated indicated in the total placer reserves is 6%. See form 12, (b), (2) "Mineral Reserves", which supplements (12), (c), (6).

9. Supply Points:

Spearfish is 14 miles distant, it is not on the RR, but is supplied by motor lines. Cheyenne Crossing is 15 miles distant where there is a loading platform on the Chicago and Northwestern RR.

The roads are excellent gravelled county roads, well maintained all year.

10. The streams are supplied by winter snows and many underground springs and gulches. Engineers previously engaged to explore the properties advise 2 dams on the upper streams to impound a minimum of 4 million gallons of water for a semi-portable placer plant. The water would be re-used from settling ponds below the plant using 8" pumps for re-supply. Water storage at these dams will receive approximately 300 gallons per minute fresh water during dry season.

11. Power is available from a high line which crosses many of Keenan Properties' claims and crosses Potato and Bear Creeks. The highline is within 1800' of the mill. The rate is 1½¢ per kw.

12. Labor:

During the 1949 placer testing with pilot plant recovery and a trenching test pit survey, from 5-12 men were employed. During the DMEA exploration in 1951, between 5 and 12 men were employed. The types used were: Caterpillar operator, dragline operator, truck driver, panner, sampler, jig man, helpers, engineers, superintendent, cook. The operator was the supervisor.

13. Attached are:

1. List of leased inventory. The buildings are in good condition, except the blacksmith ship. Some repairs and improvements are necessary to make the cabins and commissary more operable.

2. List of Keenan Properties owned equipment.

3. List of equipment on loan from W. O. Fillmore.

4. List of Keenan Properties owned equipment purchased for the 1951 testing and exploration.

NOTE: Important items of equipment for immediate production are: Pan American rougher jig, Denver Equipment Mineral jig, pumps, engines, small truck, caissons, chain blocks.

14. No conditions to report.

Note:

A careful reading of the Driscoll and Amundsen reports on sampling and a comparison of the similarity of the results obtained during the Keenan, Driscoll and Amundsen work with the values shown in the Johnson "composite" sample leads to the following observations:

(a) The recovery method used and particularly the operation of the jib during the Johnson sampling resulted in the recovery of fair gold values but much less of the lighter minerals.

(b) The Johnson ratio of concentration was not sufficiently high, resulting in "trace" and "nil" reports, although, with a high ratio of concentration such as was employed by Johnson in the single, more reliable "composite" sample, positive results were obtained which were very encouraging and closer to the Keenan, Driscoll and Amundsen work, which used high concentration ratios.

It is recommended particularly that the sampling practices used in phase 2 be adjusted to correct these poor techniques.

NOTES ON KERMAN PROPERTIES LODE CLAIM DEPOSITS.

The 87 lode claims, which have been consolidated to make Kerman Properties, contain many Pegmatite dikes which are principally coarse-grained intergrowths or massive segregations of feldspar, quartz and mica. Some dikes contain notable amounts of cassiterite, columbite, tantalite, spodumene (lithium), veins of gold and veins of tungsten and talc.

The Geology of the area is as follows:

Quarternary: Alluvium
Terrace Gravels.

Tertiary: Lamprophyre dikes
Pseudo-leucite bearing and nephaline-bearing intrusive rocks.
Monzonite and Syenite porphyry.

Paleozoic: Deadwood formation (Cambrian)
Whitewood Limestone (Ordovician)
Englewood Limestone (Carboniferous) undefferentiated.

Pre. Cambrian:
Pegmatite
Tin-bearing Pegmatite
Quartz-mica schist and Hornblend schist.

Reference: See U.S.Geological Survey Bulletin 922 T.

MS 1787, CONNERS GROUND A PART OF KEENAN PROPERTIES (558 ACRES)

During the period of the initial gold rush to the Black Hills of South Dakota, much gold was recovered by hand panning from the gravels on the streams, now controlled by Keenan Properties.

Before 1895, Conners Ground, comprised of 558 acres, was purchased from a group of coaters. The following condensed data was printed as a brochure about 1904 by Milton C. Conners:

Twenty years ago Milton C. Conners, senior, a wealthy cattleman of Spearfish, S. D."became interested in a large body of mining ground in Bear Gulch district on the boundary line between Wyoming and South Dakota, in Lawrence County, comprising 558 acres. Placer miners engaged in placer mining for gold were annoyed by finding the riffles in their sluice boxes filled up with little black cubes. For several years they complained of being bothered with chunks of black 'iron' about the size of a grain of wheat and the specific gravity of which was so near that of gold that it accumulated in the riffles and filled them up. One day a Cornish miner happened in and upon looking at the strange mineral at once proclaimed it to be stream tin. Search was at once made for the edges from whence the stream tin came, in the adjoining mountains and resulted in a veritable mountain of tin stone, afterwards proclaimed by English experts to be the true tin stone similar to that of Cornwall, England, but remarkably pure and free from those substances usually found in Cornwall tin stone that makes it so difficult to smelt."

Expenditure of $60,000 followed his purchase, in exploration by many shafts and tunnels revealing "ore bodies to an extent almost beyond calculation." Mr. Conner's death curtailed plans for a 500 ton a day tin reduction plant. In the 10 years after, his sons spent another $50,000 in development and the ores were exhibited at World's Fairs in Chicago andSt. Louis. We quote: "The most inexperienced can with a bare pick and shovel in five minutes time on almost every separate acres of the 558 acres--uncover and disclose tin--bearing stone."

Assays from the 75' shaft disclosed 11.07% tin (Ricketts & Banks New York, Dec. 21, 1904). The report reads that no ore assayed less than 40% tin when shipped to various reduction plants at Denver and elsewhere. Tin was worth 30¢ per lb.

The report states that scientists such as Professor Alonzo Chase of Cornell University investigated the property about 1896 and his sampling averaged 3.22% tin per ton of ore. Professor Wm. Black of New Haven published his findings in the Transactions American Institute of Mining Engineers as did Professor Carpenter, President of South Dakota School of Mines who made an exhaustive examination of the district and who also reported finding Columbium-tantalum, one mass weighing 2000 lbs. (Reported AIME Journals, Library of Congress).

F. M. Stankovitch, Assayer of Lead, S.D., May 5, 1905: The results of the assays made on Conner's Ground, on Bear Gulch from a number of samples from the various open cuts, shafts and tunnels, ran all the way from one to sixteen percent in tin, and because of the geological formation I will not be at all surprised if when the property is developed it proves "to be one of the richest tin-mining districts in this country or Europe."

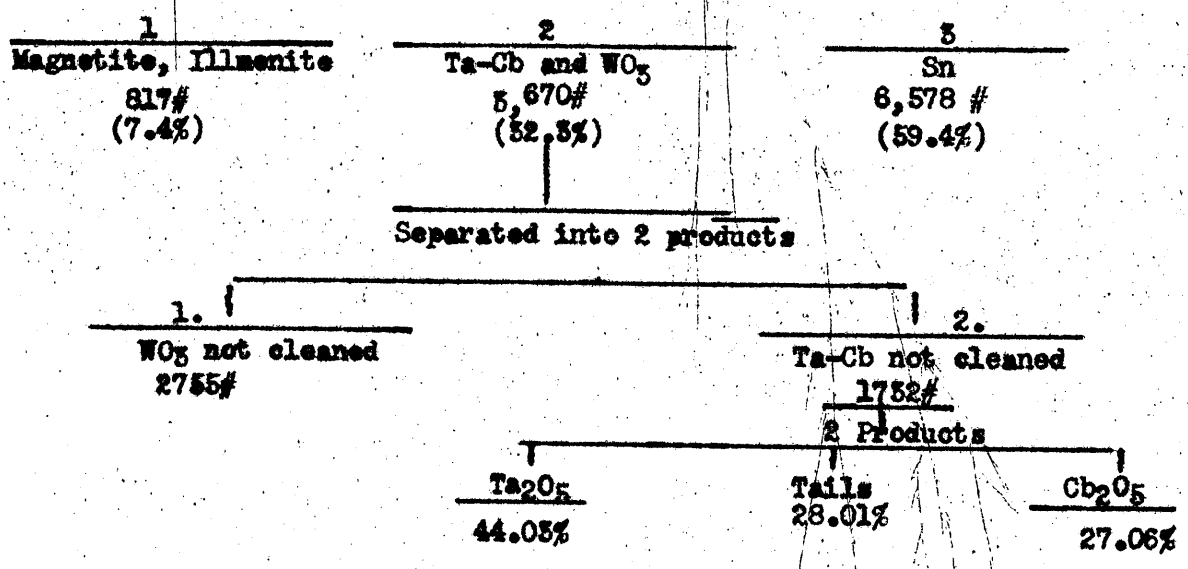
Refer to Taggart's "Handbook of Mineral Dressing" p. 2-221 "Only important domestic production (Columbite-Tantalite) is from Black Hills, S. D.; output of concentrates was 8 tons in 1937, 18 tons 1938, 340 lbs. 1939, 1928, 1929 28.5 tons concentrates, ranging from 38.7 to 57% Cb_2O_5- Ta_2O_5."

Further information:

It is known that of the total above columbite-tantalite concentrates produced by the Fansteel Metallurgical Co., during their operation, 12,000 lbs. of this concentrate was recovered from a small area of what is now part of Keenan Properties gravels.

Separation Flow-Sheet of Columbium-Tantalum Concentrates by Fansteel Metallurgical Corp. 1957.

The first separation gave 3 products, as follows: (from 11,072# Concentrates)

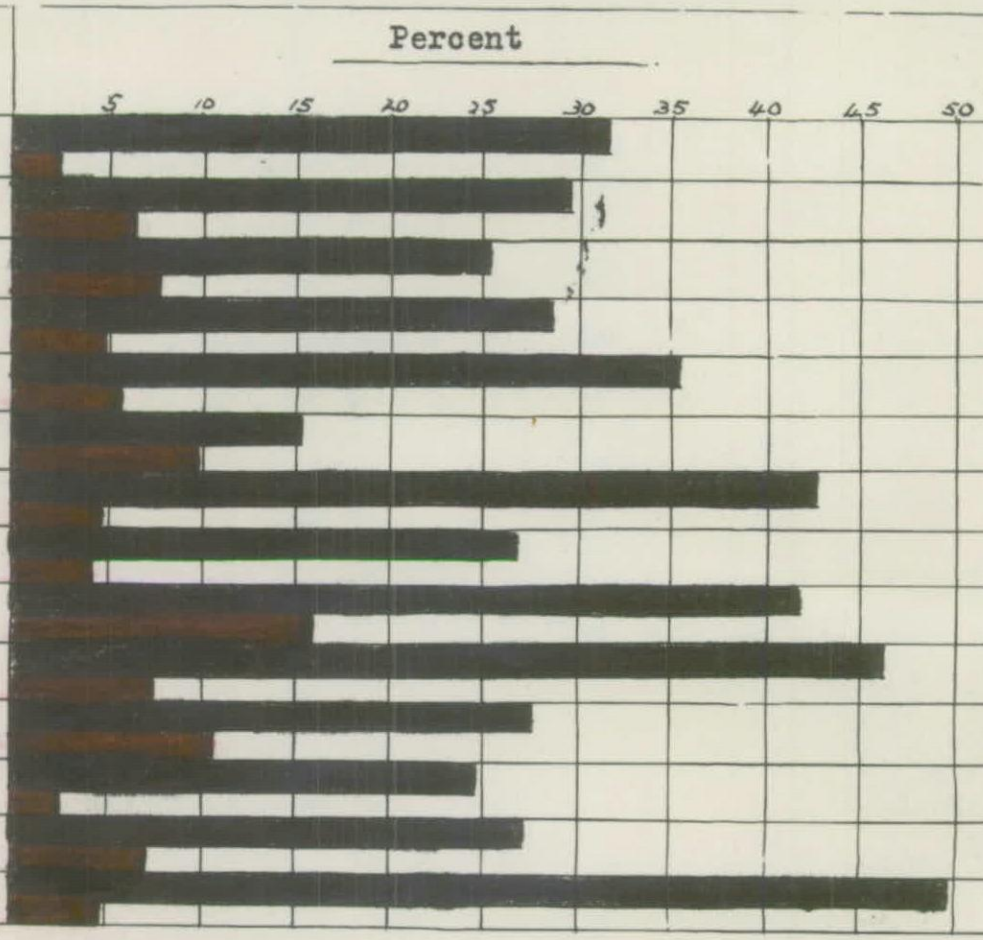


Ex-A.

RATIO OF TIN TO TUNGSTEN

As Certified by Analysis Certificates on Keenan Properties
Placer Gravel Concentrates.

Tin - [redacted]
Tungsten - [redacted]
Columbite-tantalite percentages shown in right hand column.



Assays	Columbite-tantalite %
22	7.2
I3	7.25
8	9.9
I (a)	not analysed
I (b)	4.09
I (c)	12.02
I (d)	not analysed
I (e)	8.25
I (f)	17.35
I (g)	3.28
I (h)	"present"
I (i)	8.6
I (k)	II.5
8 (m)	9.9

Note: Item one shows average percentages of 22 different assays.
Item two shows average percentages of 13 different assays.
Item three shows average percentages of 8 different assays.

The above 43 assays are part of Placer survey report data, as certified by Oscar N. Bribach, Aurora, Colorado.

(a) - Tin Processing Corp. (Longhorn Smelter) 8/II/1948
(b) -F.C. Broeman Co, Cincinatti, #AF-328I-2 (minus ¼inch material)
(c) - F.C. Broeman Co, " " (plus ¼inch ")
(d) - Wah Chang Corp, New York, letter I0/4/1948
(e) - F.C. Broeman Co, Cincinatti, #FIBEM dated I2/I/1948
(f) - Wah Chang Corp, New York, #X-I I/2I/1949
(g) - Ledoux & Co, Inc. New York. #636I5I dated 9/2I/1949
(h) - Walker & Whyte Inc., New York, 9/6/1949
(i) - Oscar N. Bribach, Aurora, Col. December 5, 1949
(k) - Oscar N. Bribach, " December 5, 1949
(m) - Shows the average percentage of 8 different assays on concentrates produced by Pilot Plant Operation, Certified by Oscar N. Bribach.

7(C)

POTATO CREEK

TEST PLANT RECOVERY DATA - 1949

Cubic yards washed.	5,104	c.y.
Rougher concentrate recovered	61,000	lbs.
Cleaner concentrate recovered/1	4,910	lbs.
Cleaner concentrate recovered/2	585	lbs.
Denver Jig tailings in mill /3	50,000	lbs.
Gold amalgamated or recovered	57	ozs.

Recovery	Sn	@ .814 lbs cu.yd.	$ 0.651 @ 74¢ lb.
	Cb - Ta_2O_5	@ .325 " "	0.465
	WO_3	@ .050 " "	0.065
	Au	@ .012 ozs.sht.tn.	0.371
Total recovery value per cu.yd.			$ 1.550

Total Costs (John Green Accountant, Cost of Pilot Plant recovery only). $ 0.680 per cu.yd.

/1 Analysis: 54.2% Sn, 4.2% WO_3, 9.9%Cb-Ta..Fines - 8 mesh.

/2 Analysis: 37.2% Sn, 11.0% WO_3, 10.8%Cb-Ta..Coarse,plus 8 mesh.

/3 Analysis: 2.9% Sn, 2.3%Cb-Ta..Rough concentrate.

PILOT PLANT WORK SHEET, 1949 testing.

OSCAR N. BRIBACH.

800 Dayton Street,
Aurora, Colorado,
December 5, 1949.

Samples assayed for Keenan Properties.

Description	Oz. per tn Gold	% Tin	% WO3	% Earth Acids	Wt. of sample in grams	Milligrams gold	Remarks.
X-1	1.85	60.0	2.0	7.9	354	22.55	Pan Am Jig rougher 10/26/49
X-2	10.15	54.9	5.9	7.7	589	155.11	Denver Jig Product 10/26/49
X-3	0.05	57.2	11.0	10.8	290	0.52	Pan Am Jig Basket 11/1/49
X-4	15.48	54.2	4.0	9.9	327	151.01	Represents 375# from 2650# rougher CON
X-5	4.86	50.7	1.4	7.9	512	52.08	Direct rougher from Pan Am Jig #1 batch
X-6	13.94	4.9	1.6	6.5	1058	506.52	Represents 4350# rougher from 470 cu.yd
X-7	2.81	52.4	5.6	10.2	589	55.25	Denver Jig product (250# net amalgamate
X-8	0.33	44.5	2.0	10.0	269	3.00	Reps. 515# from 2550# rougher-84 yards
X-9	4.15	59.2	5.5	9.2	807	115.11	Denver Jig #1 batch from 3500# on 11/12
X-10	0.05	5.1	0.1	0.3	580	0.91	" #2 "
X-11	6.49	10.4	0.5	6.3	807	179.86	Represents 3500# rougher on 11/12
X-12	0.002	0.09	0.01	0.04	2865	2.23	Represents tailings from # X-9,10,11
X-13	0.002	0.07	0.02	0.2	2111	1.05	Represents 25 ton tailing pile in mill
X-14	0.07	0.5	0.01	1.1			Tale sample
X-15	0.05	24.5	1.5	8.6	625	1.06	Coarse, from Pan Am batch.
X-16	0.76	2.9	nil	2.5	575	14.90	Tailings Denver Jig 8/1 to 10/9
X-18		0.5					Random feldspar sample
X-19	0.12	27.2	7.3	11.5	274	1.11	Plus ¼ minus ½" from Pan Am Jig basket

Notes: Pan American Jig - clean shot, adjusted bars and water, Changed Screen on Denver Jig.

Copy

(signed) Oscar N. Bribach

8/27/52 gla

OFFICE OF THE ADMINISTRATOR

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION

~~WASHINGTON 25, D.C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 25 1952

August 22, 1952

Memorandum

To: Operating Committee, Defense Minerals Exploration Administration, Interior Building, Washington 25, D. C.

From: Executive Officer, Field Team, Region V

Subject: Docket DMEA-654x, Contract Idm-E58
Keenan Properties, South Dakota

Reference is made to your letter of June 19, 1952, transmitting applicant's request for Phase 2 of the subject project.

Because of the necessity of examining areas proposed for work in Phase 2 that were not in the original project boundaries and the obtaining and complete concentration and analysis of check composite samples, considerable time-consuming work was necessary which delayed determination of initiating Phase 2 until this time.

Analysis of concentrated samples are yet to be received; therefore, a complete, detailed report to substantiate all the findings and conclusions is still being prepared. The attached memorandum serves only to indicate the final conclusion that Phase 2 is not economically justified and will, as stated, be followed by the detailed factual data from which the conclusion was reached.

The original and two copies of the preliminary memorandum report are attached.

A. B. Needham
Executive Officer
Field Team, Region V

Attachments 3
ABNeedham:dg
cc Dutton
Mullen
Redden
Region V
files
df

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 25 1952

Rapid City Field Office
School of Mines Campus
Rapid City, South Dakota

August 20, 1952

Memorandum

To: A. B. Needham, Executive Officer, DMEA Field Team, Reg. V

From: Supervising Engineer, Rapid City Field Office

Subject: Preliminary report on proposal for Phase II, Keenan Properties, DMEA Docket 654X, Contract Idm E-58, Tin, columbium-tantalum, tungsten

The proposal for Phase II of the exploration of the Keenan Properties in Lawrence County, South Dakota and Crook County, Wyoming has been carefully analyzed and is being intensively considered.

The proposal submitted by the operator contains a series of exceptions to the report of the Walter W. Johnson Co., consultant to the operator during Phase I of the exploration project. It must be pointed out that the Walter W. Johnson Co. was in the employ of the operator, and according to the contract the exploration was under the sole direction and control of the operator. Therefore, it is not the function of the Bureau of Mines to defend the report of the Walter W. Johnson Co., which, in effect, is the operator's report.

It is further noted that the operator refers to figures that accompanied the Walter W. Johnson report as being the work of L. Shaffer, Bureau of Mines representative. As a matter of record, L. Shaffer was the representative of the Bureau of Mines from August 13 through September 15. On that date, because of personnel limitations, L. Shaffer was relieved of his duties. Maps were prepared subsequent to that date and any work performed by L. Shaffer on the report of the Walter W. Johnson Co. was for the account of that company and <u>not</u> for the Bureau of Mines.

In connection with the disputed distances as shown by the Johnson report, the Bureau of Mines surveyed Potato and Bear Creeks in July 1952 with a compass and steel tape. The results show the Johnson report to be in error. This increases the total yardage available but does not affect the reported grade. Other discrepancies claimed by the operator have not as yet been thoroughly investigated, although it can be stated that at no time during the operation did any representative of the Bureau of Mines observe anything that was not in accordance with accepted principles of placer sampling.

Reviewed by
DMEA OPERATING COMMITTEE

8-27-52
(date)

The proposal for Phase II includes areas that were not contained in the original proposal. These areas have been examined by a representative of the Geological Survey and the Bureau of Mines.

The Bureau of Mines engineer, a recognized expert on sampling and operation of placer deposits, is of the opinion that the areas examined, namely, Upper and Lower Beaver Creek and Seventy Flats, in South Dakota and Mallory Gulch and Sand Creek in Wyoming, have not been sufficiently prospected to determine the existence of minerals in the gravels. The proposed extensive exploration therefore does not appear warranted by data presently available. Reports of the Geological Survey have not yet been received. ?

In the consideration of a proposal of this type, the cost of operation and value of the product must of necessity be considered and this phase has received considerable attention. In all areas examined, including Potato and Bear Creeks, it was noted that the maximum flow of water did not exceed an estimated 200 gallons per minute and is rapidly decreasing. To maintain the scale of operations as set forth by the operator would require a far greater supply. To impound spring run-offs would require substantial dams and it is somewhat doubtful if sufficient water could thus be collected to operate at capacity for a full season. Without such dams it might be possible to operate a series of small units along each creek, each using the water discharged by the preceding unit. This would require considerable small equipment and the cost of either these dams or unit equipment, which would be considerable, would greatly increase the cost of operation. The gravel deposits are all near the headwaters of the various creeks and the small water sheds preclude the development of additional supplies of water at a cost that would permit economical operation.

The product to be sold consists of a placer concentrate of mixed tin, columbium, tantalum, and tungsten minerals. None of these minerals can be concentrated by mechanical means to a grade sufficiently high to meet purchase specifications. Further separation and concentration by chemical or other means is therefore necessary before the product can be sold. Such separation and concentration must inevitably result in the loss of a certain percentage of the contained metals, possibly 100 percent for some metal. The cost of such processes will further reduce the gross value of the concentrates which must be deducted from the value per yard as determined by sampling.

To arrive at a reasonable estimate of the net metal recovery and the probable cost of such a procedure, the rejects of the composite sample from Phase I were further concentrated by mechanical means to the highest grade possible and at the greatest recovery. This product is now being analyzed and upon this result must be based the ultimate metal recovery and this percentage applied to the gross unit value of the deposit. Results of this analysis will not be available before September 1. From a visual inspection of the character of the final concentrate and the analysis of the composite sample from which it was derived, it is believed that the net metal recovery will be relatively low.

From the preceding data, which is incomplete and subject to revision, it is not believed that the expenditures requested for Phase II of the exploration project are justified. It would appear that the cost of exploration, development and operation, followed by chemical or other processing to recover the contained metals in salable form, will exceed the gross value of the deposits.

Further detailed reports covering all items of the proposal are being prepared or will be prepared when further essential data are obtained.

D. H. Mullen

D. H. Mullen

cc: Reg. Director, Reg. V
Needham (3 extra)
files

RECEIVED
AUG 21 1952
DEPT. OF INTERIOR
BUREAU OF MINES
MINNEAPOLIS, MINN.
REGION 6

W. C. BROADGATE

Dear Cap.,

I note by a wire signed by Paul Allsman that Minneapolis is making a "field study on economic feasability" of phase 2.

It seems to me that any economic study should be made after phase 2 when we will really know what we have to deal with.

Bill

OFFICE OF THE ADMINISTRATOR

7/25/52 gla

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION

~~WASHINGTON 25, D.C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

July 22, 1952

Memorandum

To: Frank E. Johnson, Chairman, Operating Committee, Defense Minerals Exploration Administration, Interior Building, Washington 25, D. C.

From: Executive Officer, Field Team, Region V

Subject: Docket DMEA-654x, Keenan Properties, South Dakota

It appears now that the field team will return a negative report and wil recommend that phase 2 of the contract Idm-E58 be not started.

Data to substantiate the decision is being compiled; and because it involves considerable metallurgy and economic studies, the report will, in all probability, not be completed for several weeks.

A. B. Needham
Executive Officer
Field Team, Region V

ABNeedham:dg
cc Dutton
Mullen
Redden
Region V
files
df

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 25 1952

7/22/52 gla

OFFICE OF THE ADMINISTRATOR

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
~~WASHINGTON 25, D.C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 21 1952

July 17, 1952

Memorandum

To: Frank E. Johnson, Acting Administrator, Defense Minerals Exploration Administration, Interior Building, Washington

From: Executive Officer, Field Team, Region V

Subject: Docket DMEA-654x, Peggy Keenan, d/b/a Keenan Properties

Reference is made to your teletype received today concerning the subject project. The Rapid City office has not completed the report on Phase II of the contract. Mr. Needham will return to the office on July 21, and advise you on status of report.

Walter E. Lewis

Walter E. Lewis
For A. B. Needham, Executive Officer
Field Team, Region V

WELewis:dg
cc Dutton
Mullen
Region V
files
df

FILE COPY
SURNAME:

Ellis
F. E. Johnson

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

D.M.E.A.

Ernest W. Ellis
5295 4640

Temporary Symbol 14X3923.970 Working Fund, DMEA
July 17, 1952

A. L. Needham, Executive Officer, DMEA Field Team, Region V,
2908 Colfax Ave., South, Minneapolis 8, Minnesota.
Docket No. 654X, Peggy Keenan d/b/a Keenan Properties

RE DOCKET DMA-654X KEENAN PROPERTIES PLEASE ADVISE WHEN YOU
WILL FORWARD RECOMMENDATIONS ON PHASE TWO OF CONTRACT.

(signed) FRANK E. JOHNSON (for) 7/17/52
ACTING ADMINISTRATOR

EWEllis/gla 7-17-52
cc to: Adm. Reading File
Docket
Mr.Ellis
Confirmation to DMEA Field Team, Region V

OFFICE OF THE ADMINISTRATOR

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION

~~WASHINGTON 25, D.C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

July 7, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 9 - 1952

Mr. E. D. Talbert
Assistant Chief
Contract Administration and
Audit Division
Defense Minerals Exploration Administration
Interior Building
Washington 25, D. C.

Dear Mr. Talbert:

Reference is made to your letter of July 2, 1952, concerning the MF-104 copies covering the period from September 16 - September 30, 1951, for Exploration Project Contract Idm-E58, Docket DMA-654x.

Enclosed are two copies of the unreconciled voucher covering this period. As you know, the voucher was replaced with the MF-104 Supplemental by Amendment, period September 16 - September 30, 1951.

Sincerely yours,

Walter E. Lewis

Walter E. Lewis
FOR A. B. Needham, Executive Officer
Field Team, Region V

Enclosures

WELewis:dg
cc Dutton
Hill
Region V
files
df

FILE COPY
SURNAME:

Alley
Talbert

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

JUL 2 1952

Mr. A. B. Needham
Executive Officer
DMEA Field Team, Region V
2908 Colfax Avenue, South
Minneapolis 8, Minnesota

Dear Mr. Needham:

Receipt is acknowledged of the MF-104 Supplemental by Amendment, period September 16 - September 30, 1951, for Exploration Project Contract Idm-E-58, Docket DMA-654X, Peggy Keenan, d/b/a Keenan Properties.

This office, however, has never received a copy of the previous MF-104 covering the period September 16 - September 30, 1951. In order that our records will be complete it will be appreciated if you will furnish us with two copies of this voucher.

Very truly yours,

Signed

S.H.
7-2-52

E. D. Talbert, Assistant Chief
Contract Administration and
Audit Division

AMAlley/ama
July 1, 1952

Copy to: Admr. Reading File
Mails and Files
Mr. Ellis
Mr. Chambers

OFFICE OF THE ADMINISTRATOR

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION

~~WASHINGTON 25, D.C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

June 20, 1952

Memorandum

To: Operating Committee, Defense Minerals Exploration Administration, Interior Building, Washington 25, D. C.

From: Executive Officer, Field Team, Region V

Subject: Operator's Monthly Progress Report - Supplemental by amendment 9/16 - 9/30, Completion Phase 1. Docket DMA-654x, Contract Idm-E58, Keenan Properties

Here are two copies of the subject report, as processed for payment, for your files.

A. B. Needham
Executive Officer
Field Team, Region V

Attachments 2

ABNeedham:dt
cc Dutton
Region V
files
df

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
JUN 23 1952

FILE COPY
SURNAME:

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

Mr. A. B. Needham
Executive Officer
Field Team, Region V
2908 Colfax Avenue, South
Minneapolis 8, Minnesota

JUN 19 1952

Re: Docket No. 654X, Contract Idm-058
Peggy Keenan d/b/a Keenan Properties
Lawrence County, South Dakota
(Tin, Columbium, Tantalum, Tungsten)

Dear Mr. Needham:

Enclosed herewith is the formal request and proposal for Phase II of the above captioned contract. Also enclosed is a photostat of the Walter W. Johnson report which was sent to your office with our letter of May 22.

Included with the Phase II proposal you will note a memorandum on the subject project by Bill Broadgate dated June 2, 1952. This memorandum draws attention to several apparent discrepancies in the Johnson report. One important difference lies in the calculation of yardage that has been tested to date. It is stated that Johnson calculated from maps that were reduced without taking into consideration such reduction in the scale. There are various ways of checking the difference. One way would be to actually tape the distance between two of the trenches whose locations are shown on the map.

Where the proposed work is to be done on that area not specifically shown in the land description of the contract, if you agree that the work should be done as proposed, the additional land description can be added to the contract so as to protect the Government in any future production. You will note, however, that the estimated cost of Phase II has been reduced from $81,000 in the existing contract, to a total of $59,680.

You may find it necessary to take a few spot samples from the existing trenches where the Johnson work was done, in order to check some of the samples that were sent to you providing you have not already done so. This would, of course, entail considerable work in that the samples would have to be concentrated to properly reveal this columbium-tantalum content. Perhaps your knowledge of the samples you have is sufficient upon which to base your recommendation.

In the event you find it necessary to get in
ach with the Applicant direct, you may address her care
Mr. W. C. Broadgate, 421 Tower Building, Washington, D. C.

Sincerely yours,

(signed) FRANK E. JOHNSON (2H2) 6/19/52

Chairman, Operating Committee

Enclosures:
1 copy Johnson report
1 copy Proposal, Phase II
4 maps

EWEllis/gla 6-18-52

cc to: Adm. Reading File
Operating Committee
Docket
Messrs. A. Renick, Rm. 3061
E. T. McKnight, Rm. 4204 GSA
Chambers, Rm. 2612
Ellis

APPROVED:

R. W. Johnson
Member, Bureau of Mines (2H3)

D. M. Lemmon
Member, Geological Survey (2H3)

FILE COPY
SURNAME:

Talbert

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

10ma654

June 17, 1952

Mrs. Peggy Keenan
4000 Cathedral Apartments
Apartment 605-A
Washington, D. C.

Dear Mrs. Keenan:

Confirming telephone conversation of this date, there is transmitted herewith Treasury Check No. 22,071,408, dated June 10, 1952, in the amount of $343.76, representing the balance due you under Contract No. Idm-E58. This check is being released to you with the understanding that you have paid Mr. Johnson in full, or that you will use the proceeds of this check to complete your payment to him.

Sincerely yours,

N S 6-19-52

(Signed) E. D. Talbert

E. D. Talbert, Assistant Chief
Contract Administration and
Audit Division

Attachment

EDTalbert/wb
June 17, 1952

Copy to: Admr. Reading File
Mails & Files

Ar

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

I agree to pay Mr. Johnson the balance of $286.00 provided he is ready to:

1. Assign the equipment which Keenan Properties paid for and give us a bill of sale on the equipment purchased;
2. Release the Keenan Properties from the lien filed in December, 1951 in Rapid City, South Dakota; and
3. The return of the gold recovered from the sampling of Keenan Properties, Phase I operation by Jack McAllister.

(SIGNED) Peggy Keenan

June 18, 1952
DATE

FILE COPY
SURNAME:

Talbert

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

n. s. in R. R.

D. M. E. A.

654

E. D. Talbert
3461 2612

1420137 Salaries & Expenses, Defense Production Activities, Interior, 1952
June 13, 1952

Mr. Jay L. Chambers, c/o Mr. W. H. King, 224 New Customhouse Building
Denver 2, Colorado

Final Check on Peggy Keenan case has been received from Needham. Please advise if the check should be delivered to Mrs. Keenan or whether Power of Attorney should be obtained and check delivered to Johnson.

(Signed) E. D. Talbert

E. D. Talbert, Assistant Chief
Contract Administration and
Audit Division

EDTalbert/wb
June 13, 1952

Copy to: Admr. Reading File
DMEA Mails & Files
Mr. Talbert

Clerical Service Section

FILE COPY
SURNAME:
800

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

Mr. A. B. Needham
Executive Officer
DMEA Field Team, Region V
2908 Colfax Avenue, South
Minneapolis, Minneapolis

MAY 29 1952

Re: Docket No. 654I
~~Contract No. Idm-E58~~
Keenan Properties

Dear Mr. Needham:

Reference is made to your letter of May 19, 1952, which covered the last MF-104's submitted by Peggy Keenan, d/b/a Keenan Properties.

You are correct in concluding that these vouchers should be accompanied by an amendment to the certificate of audit issued under the contract prior to its amendment. I am enclosing the original and two copies of the amendment to the certificate of audit as submitted by the Chief, Contract Administration and Audit Division. Since this project was given an on-site audit, supporting documents to the MF-104's are not necessary.

Will you please request the Finance Officer to fill out "Totals Previously Reported" and "Totals To Date" on the final MF-104's, to make these records complete in this respect. I believe everything now has been submitted which will permit the final payment of this account to the contractor.

Sincerely yours,

cc 5/29

(signed) FRANK E. JOHNSON

Chairman, Operating Committee

Enclosure

JLChambers/wb 5-27-52

cc: Admr. Reading File
Docket
Operating Committee
Mr. Ellis
Mr. Chambers

APPROVED:

/s/ J. H. Hedges
For Bureau of Mines

/s/ D. M. Lemmon
For Geological Survey

DEFENSE MINERALS EXPLORATION ADMINISTRATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

Amendment to Audit Certificate
Issued April 4, 1952 on Contract Idm-E58

The audit certificate of April 4, 1952, specified that under contract Idm-E58, docket 654X, dated July 1, 1951 between the United States of America and Peggy Keenan d/b/a Keenan Properties, 421 Tower Building, Washington 5, D. C., the total amount due Peggy Keenan from the contract was $16,754.24. Under date of May 8, 1952, the above contract was amended by the signatory parties as Amendment No. 2. Under this amendment, the total amount due Peggy Keenan for the project contract is $17,136.20, or an additional amount of $381.96.

Amendment No. 2 increased Sections 2 and 3, Labor and Supervision of Phase 1 of the contract from $2,300 to $2,681.96, thereby removing a like amount suspended in these items in the April Audit.

(Signed) J. L. Chambers

Jay L. Chambers, Chief
Contract Administration and
Audit Division

Date: MAY 27 1952

700 FILE COPY
SURNAME:

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

Mr. A. B. Needham
Executive Officer
Field Team, Region V
2908 Colfax Ave., South
Minneapolis 8, Minnesota

MAY 22 1952

Re: Docket No. 654X, Contract Idm-158
Peggy Keenan d/b/a Keenan Properties
Lawrence County, South Dakota
(Tin, Columbium, Tantalum, Tungsten)

Dear Mr. Needham:

We note in your memorandum of May 13, 1952, that you desire two copies of the Walter W. Johnson Company report on Phase I of the captioned project. For the time being, we are sending you only one copy since there are not sufficient copies to go around. Peggy Keenan did not receive a copy of this report from the Johnson Company, although it is her understanding that one is to be sent to her. In the meantime, we have loaned her one of our office copies and it is our understanding that she is having the report, including the tables (but not the maps), duplicated and will make available to us at least one copy. When we receive said copy we can forward it to you.

She is now preparing a formal request and proposal for Phase II of the work. No doubt, in due time, her application will be forwarded to your office for recommendation.

Sincerely yours,

5.22

(signed) FRANK E. JOHNSON

(JHS)

Chairman, Operating Committee
EWEllis/gla 5-20-52
cc to: Adm. Reading File
Operating Committee
Docket
Messrs. A. Renick, Rm. 3061
E. T. McKnight, Rm. 4204 GSA
Chambers, Rm. 2612
Ellis

Enclosure

APPROVED:

J. H. Hedges (JHS)
For Bureau of Mines

/s/ D. M. Lemmon (JHS)
For Geological Survey

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 15 1952

May 13, 1952

Memorandum

To: Operating Committee, Defense Minerals Exploration Administration, Interior Building, Washington 25, D. C.

From: Executive Officer, Field Team, Region V

Subject: Operator's Final Report - Docket DMA-654x, Contract Idm-E58 Keenan Properties

We note from a copy of a letter dated May 5, 1952, from Mr. Chambers to Mr. W. W. Johnson, engineer in charge of the subject project, that four copies of Johnson's report have been received.

We would appreciate two copies of the report, one for the Regional files and one for our Rapid City Field office.

A. B. Needham
Executive Officer
Field Team, Region V

ABNeedham:dt
cc Dutton
Mullen
Redden
Region V
files
df

FILE COPY
SURNAME:

Ellis

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

MAY 12 1952

Mr. A. B. Needham
Executive Officer
DMEA Field Team, Region V
2908 Colfax Ave., South,
Minneapolis 8, Minnesota

Re: Docket No. DMA-654X
Contract No. Idm-558
(Tin, Columbium, Tantalum, Tungsten)
Peggy Keenan, d/b/a Keenan Properties
Lawrence County, South Dakota

Dear Mr. Needham:

Attached the Contract

Enclosed find Amendment No. 2 for your file on the above captioned docket. We have delivered the Operator's copy to Applicant's principal at the Washington address. A copy for the Regional Finance Officer will be forwarded directly by the Washington Finance Division.

Subject amendment was quite thoroughly discussed with the Legal Division as well as the Contract Administration and Audit Division. The outcome of said discussion was a decision to pay the sum of $343.76 (90% of $381.96) which amount does not exceed the Government's share of the contract.

Four copies of the final report of the Walter K. Johnson Company have been received in Washington.

Sincerely yours,

(signed) FRANK E. JOHNSON

Chairman, Operating Committee

Enclosure

EWEllis/gla 5-8-52
cc to: Adm. Reading File
Docket
Operating Committee
Messrs. Chambers (with original copy of amendment)
Ellis

J. H. Hedges
For Bureau of Mines

/s/ D. M. Lemmon
For Geological Survey

700
FILE COPY
SURNAME:

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

MAY 12 1952

Miss Peggy Keenan
605-A Westchester Apts.
4000 Cathedral Ave. N. W.
Washington, D. C.

Re: Docket No. DMA-654X
Contract No. Idm-E58
(Tin, Columbium-Tantalum, Tungsten)
Lawrence County, South Dakota

Dear Miss Keenan:

Enclosed please find your copy of executed Amendment No. 2 to Exhibit A of the above captioned project. This amendment provides for the payment of 90% of $381.96, or $343.76, and represents extra labor above the estimated contract amount.

In order to collect these approved funds, kindly file four copies of the regular progress report (Form MF-104) with the Executive Officer of Region V as you have done in the past.

Sincerely yours,

C. O. Mittendorf

5/12

Acting Administrator
Defense Minerals Exploration
Administration

Enclosure

EWEllis/gla 5-8-52
cc to: Adm. Reading File
Docket
Messrs. Chambers, Rm. 2612
Ellis
DMEA Field Team, Region V (2)

FILE COPY 700
SURNAME:

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

May 8, 1952

Memorandum

To: Mails and Files Branch

From: Ernest Wm. Ellis, Chief
Rare and Misc. Metals Division

Subject: Copy of Amendment No. 2
Docket No. DMA-654X, Contract Idm-E58
Peggy Keenan d/b/a Keenan Properties
Lawrence County, South Dakota
(Tin, Columbium, Tantalum, Tungsten)

Attached for recording in your office is a copy of Amendment No. 2 to Exhibit A of the subject contract between the operator named in the above reference and the Government of the United States.

Attachment

EWEllis/gla

cc to: Adm. Reading File
Docket
Mr. Ellis

May 8, 1952

Memorandum

To: Mr. Kenfield Bailey, Chief,
Budget and Finance Branch, Bureau of Mines

From: Ernest W. Ellis, Chief
Rare and Misc. Metals Division

Subject: Copy of Amendment No. 2
Docket No. [illegible]-654X, Contract [illegible]-558
Peggy Keenan d/b/a Keenan Properties
Lawrence County, South Dakota
(Tin, Columbium, Tantalum, Tungsten)

Attached is a copy of Amendment No. 2 to Exhibit A of the subject contract between the operator named in the above reference and the Government of the United States, dated today, for your recording and conveyance to the Finance Officer of Region V, Minneapolis, Minnesota.

Attachment

EWEllis/[illegible]la
5-8-52

cc to: Adm. Reading File
Docket
Mr. Chambers, Rm. 2612
Mr. Ellis

KEENAN PROPERTIES, INC.

SPEARFISH, SOUTH DAKOTA

TIN
COLUMBIUM-TANTALUM
TUNGSTEN
GOLD

TELEPHONE
SPEARFISH 2F14

8 May 1952.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 12 1952

Mr. Ernest Ellis,
Chief, Rare Metals Division, Room 4640,
D M E A, Department of the Interior,
Washington 25, D.C.

Dear Mr. Ellis:

In order to clarify the points which we discussed to-day, the following is submitted with reference to additional yardages and values:

1. Placer Survey M.S. 392 (Beaver Creek.)

There is a typographical error on the map "Keenan Properties Lode Claims Showing Patented and Unpatented Surveys." This map includes Bear Creek, Potato Creek and Placer Survey M.S. 392. On this map, M.S. 392 should read M.S. 393 (located on Bear Creek at 70 Flats.)

The lease for Placer Survey M.S. 392 (Beaver Creek) is correctly listed in Appendix 1. of Contract Idm E-58. This large Placer Survey, although included in the original Contract and Amendment dated August 31, 1951, paragraph 1, was not tested because on September 21, 1951, the Operator found that the engineering work had exceeded the total budget of $19,000.00 for Phase I. Although 2 test shafts had been started and deep gravel equipment purchased at a cost of $1,482.41 by Keenan Properties, the exploration work could not be finished for lack of funds and the project was closed September 22, 1951.

2. Placer Survey M.S. 393 (70 Flats on Bear Creek.)

In the Walter W. Johnson Co. report the maps indicate lower Bear Cr. as 70 Flats. This placer gravel of M.S. 393 is under control of Keenan Properties, and previous test data shows the necessity for checking the values and yardage of this Placer Survey during Phase 2. of Contract Idm E-58; particularly is this necessary since previous engineering test data shows these values and yardages to be of sufficient importance to be included in the exploration during Phase 2.

3. High Bar Gravels.

With further reference to our conversation regarding additional gravels containing commercial values, controlled by Keenan Properties, attached please find copies of notes made by W.C. Driskill during his investigations (1931 to 1943) on what is known as the High Bar deposit in the Old Potato River channel. Please note that an estimate of 1,010,000 cubic yards is shown. In connection with this high bar,

during the Phase 1 (1951) exploration by the Walter W. Johnson Co., the High Bar test trench was excavated. It was checked by the Operator and two witnesses. The concentrates from 4 average pans were immediately sealed and shipped to Oscar N. Bribach, Aurora, Colorado, and assayed as follows:

Au (mg)	WO_3%	Cb_2O_5%	Ta_2O_5%	Tin%
0.44	0.01	2.7	1.4	4.3

weight of sample...34 grams.

4. Sand Creek Gravels.

The attached rough sketch showing the head waters of Bear, Potato and Beaver Creeks, includes the head waters and course of the Sand Creek stream in Wyoming. The gravels of Sand Creek and its tributaries are controlled by Keenan Properties. Concentrates recovered from Mallory Gulch, a tributary of Sand Creek, assayed (August 3, 1951) as follows:

Au (mg)	WO_3%	Cb_2O_5%	Ta_2O_5%	Tin%
0.04	—	3.9	2.1	55.8

weight of sample...14 grams, (from one pan of gravel)

Note: This rough sketch indicates the location of the High Bar, marked in yellow and green, which is referred to in subpara 3.

The attached photostat shows the extent of Sand Creek which flows through the dikes from which Fansteel recovered part of the 78,000 pounds of columbium-tantalum taken from this area during a short period.

On September 6, 1951, Mr.Walter W. Johnson advised the Operator that Mr.D.H. Mullen, Chief Engineer, DMEA Field Office, Rapid City, agreed to include the cost of caissons and sinking the shaft on Beaver (M.S.392). He also advised that a shaft be put down on the High Bar. Mr.Johnson estimated the pay streak on 70 Flats (M.S.393) to be 100-150 feet wide, and further stated that he had recommended to Mr. Mullen that additional money be provided to pay for a drill for at least one line of holes across upper Sand Creek above the falls.

At the time of the Amendment dated August 31, 1951, to Contract Idm E-58, Mr.Johnson and the Operator investigated all the placer gravels referred to above. In a letter dated September 17, 1951, Mr. Johnson sent the attached reply to the Operator specifically in regard to the removal by his crew, of gold from the daily test run concentrates, to the Beaver Cr. sampling, the High Bar shaft and testing on Sand Creek. He indicated that this work would have to be accomplished in the summer of 1952, in Phase 2. (See letter attached.)

Yours very truly,

Peggy Keenan

Peggy Keenan.

From W. Driskill notes (1

BEAR CREEK

Bear Creek has its origin around the Nigger Hill Pegmatite of Tinton, South Dakota. Nigger Gulch is another branch of Bear Creek. Originally many years ago when the mountains and Creeks were much younger than they are now, Bear Creek originated at Nigger Hill just where it is now, and flowed eastward to a confluence with Potato Creek, which at that time flowed from the headwaters of Beaver Creek along the east side of the ridge east of the present channel of uppor Potato Creek, thence west of the present channel crossing the ridge between Bear and Potato Creek just above Bear Town, and on down Bear Creek at where the present channel of Two Bit Gulch now is, then just east of Conners Rock further down it originally ran over the ridge to where Beaver Creek now is near the Beaver Buttees.

Later, an uplift occurred, diverting Potato Creek eastward over to Iron Creek, and Bear Creek then formed its own channel. All of these tracings of the old channel of Bear Creek were obtained by a study of the gravel bar on the ridge between Bear and Potato Creek. These old gravel bars carry gold and tin and tantalite, and are helping to constantly enrich the present channels of the Creeks, through the many smaller draws and gulches cutting into them. There is considerable conglomeratic sandstone in some of these bars, indicating that these old river beds had been made when the whole country was very young. Also the size of the boulders give one the impression that the flow of water in those days must have been considerable more than it is now, that they were practically rivers, just like Smith River in Northern California, which has the appearance of what these creeks must have looked in these days.

POTATO CREEK

As previously mentioned, Potato Creek long ago was once originally a part of Beaver Creek, with Bear Creek flowing into it where there is a dip in the road above the turnoff to the Mill of Dakota Tin and Gold Company. The original Potato Creek started somewhere south of Cement Ridge, past the west side of Ben Sager's Ranch, and around the east side of the ridge east of Potato Creek, present, meeting the original Bear River, which it is safe to say probably originated north of Cement ridge, thence down Two Bit Gulch into the present channel of Bear Creek, and probably east past the Beaver Buttes. Then later an uplift occurred, pushing it off Two Bit and eastward to Iron Creek along the ridge south of Bear Creek, thence crossing present Iron Creek at Alfred Johnson's ranch, following the ridge south of Iron Creek, then cuting across directly northwest part Perrigoues Sawmill and over the ridge coming into Spearfish Canyon considerably below the present Iron Creek Channel and entrance into Spearfish canyon.

This original Potato River had a considerably largerflow as attested by the depth of gravel and large boulders in its channel. It carries tin and gold inhadeterminded amounts. Somewhere along its course is the mother lode of the gold. It also carries Tantalite. It is a moot question as to whether that tantalite came from Nigger Hill via the original Bear River or whether

there is a Tantalite Pegmatite of considerable proportions u der some of that deep gravel. In concentrates, the Tantalite content is apt to be over 10% with magnetite removed. Some day some operator will manage to figure a way to test that deep gravel as to the feasibility of working it, as it is so deep, the pockets of gold are apt to be much larger, as well as tin and tantalite pockets.

Below Two Bit, on Bear Creek the concentrates carry 10% tantalite just like they do in Potato Creek in the plus 20 mesh sizing. Concentrates of Potato Creek found on the writers former claims there carry 25% Tantalite in the minus 20 mesh sizing for a plus 6 gravity concentrate. The coarser concentrates ran 62% tin. There is much concentrate and gold in the small gulches running up into the high bars. The principal source of the gold in the placers seems to be these high bars.

This creek goes past an old gravel bar, originally Bear River, then makes a right angle turn to the northeast past the mill, goes through a narrow gorge opening into a basin on Johnny Perrett's ground. At the mouth of the basin is where the old Potato River crossed Johnny Perrett's from southeast to northwest. There is placer gold and tin on the west hillside of the creek, and gravel running all the way down, indicating the creek gradually shifted eastward.

At Johnny Perrett's: very course gold is found. This seems to be true wherever present channel are in close proximity to the old river channel, such as Two Bit and Iron Creek. If someone could find a way to strip the upper layer off the old channel, he should be able to find much coarse gold and tin-tantalite concentrates on bedrock. At present, considering the brush and overburden and the lack of knowledge of this old channel, no one seems inclined to try it.

The writer's former ground has several side gulches, named Pearl, Harscrabble, Hardpan, Tenderfoot, all of which run up into the ancient channel and all of which carry gold, tin, tantalite, scheelite and in Tenderfoot is to be found B arites as well.

Now for the old River channel. On the ridge east of Potato Creek south of Perrett's there seems to be close to 800,000 cubic yards of gravel, west of Perrett's there seems to be 10,000 cubic yards, west of the writer's claims is the remaining gravel running to Two Bit, namely approximately 200,000 cubic yards, a total of 1,010,000 cubic yards of unknown value.

700
FILE COPY
SURNAME:

Hofflund
Chief (for Chambers)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

May 5, 1952

Memorandum

To: C. O. Mittendorf
Acting Administrator

From: Ernest Wm. Ellis, Chief
Rare and Misc. Metals Division

Subject: Peggy Keenan d/b/a Keenan Properties
Docket No. DMA-654X, Contract Idm-E58
Amendment No. 2

I have discussed this amendment quite thoroughly with Chief Counsel Hofflund and Mr. Chambers, Chief, Contract Administration and Audit Division. The Field Team of Region V is not disposed to pay Miss Keenan any more funds than she has been paid; nevertheless it would appear that the logical thing to do is to allow her the 90% of $381.96.

The Johnson report is now in and we are studying it. The figures reported by Johnson, based on the Operator's recommended assayer, show tin values averaging 62¢ per cubic yard. Also, the gold value averages approximately 16¢ and the columbium, tantalum and tungsten values amount to approximately 10¢, or, in over-all figures, approximately 88¢ per cubic yard, which, of course, are good values. However, with the yardage explored under the contract (280,000 cubic yards), and taking into account the estimated capital structure to bring this property into operation, at this time it does not appear that a profitable operation could be maintained. We have not been requested to advance funds, amounting to some $81,000, for Phase 2, but it is my opinion that the Field Team would not recommend going ahead with the project.

Attachment

FILE COPY
SURNAME:

Talbert

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

Air Mail

Mr. Walter W. Johnson
351 California Street
San Francisco 4, California

MAY 5 1952

Dear Mr. Johnson:

Receipt is acknowledged of four copies of your report relative to operations under DMEA Contract Idm-258, Docket 654X with Peggy Keenan, d/b/a Keenan Properties.

In accordance with previous correspondence there is enclosed herewith Check No. 20,495,269, dated April 21, 1952 on the Treasurer of the United States, together with Power of Attorney signed by Mrs. Keenan, authorizing you to receive, endorse and collect subject check.

Sincerely yours,

(Signed) E. D. Talbert

Jay L. Chambers, Chief
Contract Administration and
Audit Division

Enclosure-2

EDTalbert/wb
May 5, 1952

Copy to: Mails & Files
Admr. Reading File
Executive Officer, Region V
Mr. Ellis
Mr. Chambers
Mrs. Keenan

FILE COPY
SURNAME:

Chambers

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

APR 2 5 1952

Air Mail

Mr. Walter W. Johnson
351 California Street
San Francisco 4, California

Dear Mr. Johnson:

Reference is made to our telephone conversation of April 2, 1952, in which it was agreed that a check made out to Peggy Keenan, d/b/a Keenan Properties, in reimbursing expenses for Contract Project IDM-E-58 would be sent to you in the amount of $3,819.18, accompanied by a Power of Attorney for the check signed by Mrs. Keenan.

I am sorry to have to inform you that the auditor under the present contract determined that the total amount due Peggy Keenan is $3,532.70. I am holding this check with the consent and knowledge of Peggy Keenan until we have received your final engineering report on the project. I might add that Peggy Keenan has requested an amendment to the contract, which, if approved by the proper authorities, would furnish more than enough money to pay the balance of your claim and that she has stated to me her intention of using the money for that purpose. Please understand, however, that the Government can make no assurance or promise that the project will be amended or that the payee will use the funds for any particular purpose.

It is my understanding that you desire to accept the $3,532.70 and to expect payment from the Peggy Keenan interests for the balance. If so, please send your report in immediately addressed to Mr. C. O. Mittenderf, Acting Administrator, Defense Minerals Exploration Administration, Department of the Interior, Washington 25, D. C.

Sincerely yours,

Signed

Jay L. Chambers, Chief
Contract Administration and
Audit Division

D.N. H-2552

JLChambers/wb
April 24, 1952

Copy to: Admr. Reading File
Mails & Files
Mr. Moulds
Mr. Chambers

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~
Region V
2908 Calfax Avenue South
Minneapolis 5, Minnesota

01

April 21, 1952

TELEGRAM - 11:20 a.m.

Peggy Keenan
Apartment 605A
4000 Cathedral Avenue N.W.
Washington, D. C.

Reurtel April 16. Final voucher went to Disbursing Office April 16. Check in amount of $3,532.70 being mailed today. Discussed with Mullen equipment situation and no amendment or adjustment seems advisable. Final audit approval within $381.96 of total allowable under Phase one.

A. B. Needham
Executive Officer
Field Team, Region V

Confirmation

:BNeedham:dt

DEPARTMENT OF STATE
Defense Materials Administration
CABLE
APR 28 1952

cc Mullen
Dutton
J.L.Chambers
DMEA (Wash)
Region V
files
df

PLEASE MAIL WITH CHECK

APR 21 1952

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

April 16, 1952

RECEIVED APR 17 1952

Mr. Jay L. Chambers, Chief
Contract Administration and Audit Division
Defense Minerals Exploration Administration
Interior Building
Washington 25, D. C.

Dear Mr. Chambers:

In accordance with your instructions of April 4, 1952, there is attached a check in the amount of $3,532.70, pertinent to Docket DMA-654x, Contract Idm-E58, Keenan Properties, Inc.

Discussions with our field engineers have indicated no verbal agreements were made with the operator to purchase equipment in lieu of rental of same; therefore, the certificate of audit issued by Mr. Hull stands as the payment control document.

The enclosed check does not amount to as much as your letter of April 4 indicates is due Mr. W. W. Johnson, because previous payments amount to $13,223.54 and total allowable per audit is $16,756.24, leaving a balance of only $3,532.70.

Actually, the total amount approved, $18,618.04, is only $381.96 short of that allowable under phase 1, anyway, so that amending the contract to provide for equipment purchase would not help the situation much, and we would have a 90 percent share in the salvageable value and a disposal problem which the operator is supposed to do.

Since the Washington office has arranged for transmittal of the final report on operations from the operator's representative to them, it is presumed a copy will be made available to the Regional office.

This check resulting from the final voucher closes the docket and contract as far as the field team is concerned and this date can be assumed to be completion date.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 23 1952

Sincerely yours,

A. B. Needham
Executive Officer
Field Team, Region V

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~
Region V
2908 Calfax Avenue South
Minneapolis 8, Minnesota

April 14, 1952

Memorandum

To: Special Assistant to the Regional Director, Region V

From: Executive Officer, Field Team, Region V

Subject: Docket DMA-65[illegible], Contract Idm-E58 - Certificate of final audit Keenan Properties, Inc.

Here is the final certificate of audit on the subject contract, together with a copy of a letter from the Chief, Contract Administration and Audit Division, DMEA, with regard to disposition of the checks due to operator.

It will be noted that it is desired to have the balance due the operator made out in two checks, one for $3,819.18, which is to be sent to Jay L. Chambers, Chief of the Audit Division, where power of attorney will be executed in order that the check can be conveyed to and cashed by W. W. Johnson, the operator's former foreman who has not been fully paid. On the voucher-schedule, the finance officer will have to give the address as Peggy Keenan, c/o J. L. Chambers, Department of the Interior, DMEA Room 2612.

The other check in the amount of balance due after deducting the $3,819.18 also goes to Peggy Keenan; and instead of sending it to Spearfish, S. Dak., it is suggested it be sent with the first check to Mr. Chambers for personal delivery to Miss Keenan.

Except for the final report, this closes the subject contract and the total expenditure by the Government was $16,756.24.

A. B. Needham
Executive Officer
Field Team, Region V

Attachments
ABNeedham:dt
cc Dutton
Mallen
Reddan
DMEA (Wash) 2
Region V
files
df

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

800

Mr. A. B. Needham
Executive Officer
DMEA Field Team, Region V
2908 Colfax Avenue, South
Minneapolis, Minneapolis

Re: Project Contract IDM-E-58
Docket No. DMA-654X
Keegan Properties

Dear Mr. Needham:

I am sending you the original of an Audit Report and and Audit Certificate of the above project prepared by Mr. Robert M. Hull of this Division. Mr. Hull worked in cooperation with Mr. Mullen, Rapid City, South Dakota, and according to a letter from Mr. Hull to this office, he and Mr. Mullen were in agreement on the final findings.

The question has been raised as to whether the contract will need to be amended for time. Personally, I think our acceptance of the work would be sufficient without making a formal amendment for time. In addition, your amendment of August 31, 1951 implied extension of the project. The original Audit Report and Certificate enclosed with this letter are to be used by the Finance Officer to support payment. A copy of the Report and Certificate was left with Mr. Mullen to be transmitted to your office for your official files.

You will note that the auditor disallowed a total of $2,345.21 of the vouchers submitted by the contractor. Most of this disallowance was for purchases of equipment and payments on excess labor. If you, however, are of the opinion that the operator should be reimbursed for some of the equipment or labor, I believe you have authority to amend the contract to this extent provided the total payments do not exceed the funds allocated by the Washington Office for the project.

Sincerely yours,

4-9

(Signed) J. L. Chambers

Jay L. Chambers, Chief
Contract Administration and
Audit Division

Enclosure
JLChambers/wb 4-9-52
cc: Docket File, Mr. Moulds, Mr. Chambers, Hull

FILE COPY
SURNAME:

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

APR 4 1952

Mr. Walter W. Johnson
351 California Street
San Francisco 4, California

654

Dear Mr. Johnson:

This is to confirm our telephone conversation of April 2, 1952, in which I stated that Peggy Keenan had agreed to give you power of attorney for cashing a check in the amount of $3,819.18 due you for work on the project. You in turn agreed to submit immediately to us at least two copies of your final report and findings. It is also my understanding that you had previously agreed to submit copies to Peggy Keenan. This, however, is an arrangement between you and Peggy Keenan.

I have arranged for the Disbursing Officer to send Peggy Keenan's check in the amount stated above to Washington in my care so that I can have her complete the power of attorney which requires under federal regulations that the check number, the name of Disbursing Officer and his symbol appear on the power of attorney. I shall then send the original of power of attorney along with the check to you.

The above agreement has been discussed with Mrs. Keenan at least three times and in my opinion it is most satisfactory to her.

Sincerely yours,

Signed J.N. 4-4-52

Jay L. Chambers, Chief
Contract Administration and
Audit Division

JLChambers/wb
April 4, 1952

Copy to: Mails & Files
Mr. R. M. Hull
Mr. Moulds
Mr. Chambers

FILE COPY
SURNAME:

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

APR 4 1952

Mr. A. B. Needham
Executive Officer
DMEA Field Team, Region V
2908 Clafax Avenue, South
Minneapolis 8, Minnesota

654

Dear Mr. Needham:

Reference is again made to Project IDM-E-58, Peggy Keenan doing business as Keenan Properties. In the next few days you will receive a Certificate of Audit from Mr. R. M. Hull, Auditor of this Division, who will certify to the amount of money due Peggy Keenan, d/b/a Keenan Properties, for project operations under the first phase of her contract.

Will you arrange to have two checks drawn to Peggy Keenan, one in the amount of $3,819.18 and the second for the balance due her. I have arranged with Mrs. Keenan for the check in the first amount to be sent to Mr. Walter W. Johnson of California, in payment of work on the project which is a claim against Peggy Keenan. In order to get this check to Mr. Johnson in a manner which can be cashed, it will be necessary for it to be sent to my office and for me to have Mrs. Keenan sign an individual Power of Attorney for this particular check, giving the number of the check, the Disbursing Officer, and the symbol number. Consequently, on the voucher-schedule the Finance Officer will have to give the address as: "Peggy Keenan, c/o J. L. Chambers, Department of the Interior, DMEA, Room 2612." The second or smaller check may be sent directly to Peggy Keenan at Spearhead, South Dakota; if you and the Finance Officer prefer, both checks can be sent to me, and I will deliver the smaller check to her when she signs the Power of Attorney for the larger one.

The arrangements for the Power of Attorney for Johnson to cash the check in the amount due him also called for Johnson to submit to DMEA two copies of his final report and findings immediately. Upon receipt of this report from Mr. Johnson, we will release Peggy Keenan's large check to Johnson and send you copies of the report.

Sincerely yours,

Signed J.N. 4-4-52

Jay L. Chambers, Chief
Contract Administration and
Audit Division

JLChambers/ama
April 4, 1952

Copy to: Mails & Files
Mr. R. M. Hull
Mr. Moulds
Mr. Chambers

Taken from Memo. 4/3/52 from Executive Officer, Region V to Operating Committee; Status of projects in re. to discoveries.

The following projects have terminated without a certification of discovery or development to be made: Docket DMA-654x, Contract Idm-E58, Keenan Properties, Inc.; and Docket DMA-812x-b, Contract Idm-E93, Black Hills Keystone Corp., Sitting Bull.

The foregoing is the status of all projects to April 1, 1952.

FILE COPY
SURNAME:

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

654

DMEA

Jay L. Chambers
3461 2612
1420137 Salaries & Expenses, Defense Production Activities, Interior, 1952
March 27, 1952

Mr. A. B. Needham, Executive Officer, Region V, 2906 Colfax Avenue, South Minneapolis 8, Minnesota

Hull is on extended trip and will arrive in Rapid City, Monday 31. Did not get your message in time to locate and stop him. Talked to Keeman who says all her records are with Mullen. Hope Mullen and Hull can arrive at recommendations for settlement. Keeman agrees to make assignment of monies owed Johnson and is contacting Johnson on subject, so that Government can pay him direct. I told Keeman that Johnson's final report must be submitted before we could make any settlement with her. She agreed to accept whatever reasonable settlement offer was made.

(Signed) J. L. Chambers
Jay L. Chambers, Chief
Contract Administration and
Audit Division

JLChambers/wb
March 27, 1952

Copy to: DMEA Mails & Files
Mr. Chambers

FILE COPY
SURNAME:
800

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

654

Memorandum

March 26, 1952

To: Mr. Robert M. Hull, Rapid City, S.D. AIR MAIL

From: Jay L. Chambers (Signed) J. L. Chambers

I just received a telephone message from Mr. Needham who informs me that Mrs. Keenan will not be able to have her auditor meet with you and Mr. Mullens on Monday, March 31.

Upon receipt of this message I talked with Peggy Keenan who happens to be in Washington at present. She informs me that Mr. Mullen has all the information in regard to the project. She also stated that she will contact Mr. Johnson immediately to propose that if he will make the final engineer's report on the project, that she will make an assignment of the sufficient sum to pay the amounts she owes him for his work. She will let me know as soon as she hears from Mr. Johnson and I will send a wire or talk over the telephone to Mr. Needham and if I get the word early enough, I shall send you a wire at Rapid City.

Mrs. Keenan also said that she would like to have the accounts settled even if some of the items must be disallowed. So I hope that you and Mr. Mullen will make every effort to come to an agreement on what is legitimately due the Keenan Properties on this contract.

If the records justify such action, please prepare an Audit Report and Certificate.

R.H.
3-26-52

JIChambers/wb
March 26, 1952

Copy to: Mails & Files

DL

FILE COPY
SURNAME:

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

Mar 21 1952

Mr. Martin W. Bell
Bell and Ehrlich
Commonwealth Building
Washington 6, D. C.

(On file copies only):
Re: Docket No. DMA-654X
Keenan Properties

Dear Mr. Bell:

This will acknowledge receipt of your letter of March 14, 1952, appertaining to the exploration project at the Keenan Properties in Lawrence County, South Dakota.

It is noted that you desire a copy of the Field Team report on subject property. Please be informed that such reports made at Government expense are for Government use only. This has been a long established regulation. Accordingly, I regret we will be unable to comply with your request.

Sincerely yours,

C. O. Mittendorf

cc 3/21

Acting Administrator
Defense Minerals Exploration
Administration

EWEllis/gla 3-20-52
cc to: Adm Reading File
Docket
Mr. Ellis
Field Team, Region V (2)

700 FILE COPY
SURNAME:
Ellis

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

Martin W. Bell, Esq.
Bell and Ehrlich
Commonwealth Building
Washington 6, D. C.

(On file copies only):
Re: Docket No. DMA-654X
Keenan Properties

Dear Mr. Bell:

This will acknowledge receipt of your letter of March 14, 1952, appertaining to the exploration project at the Keenan Properties in Lawrence County, South Dakota.

It is noted that you desire a copy of the Field Team report on subject property. Please be informed that such reports made at Government expense are for Government use only. This has been a long established regulation. Accordingly, I regret we will be unable to comply with your request.

Sincerely yours,

Acting Administrator
Defense Minerals Exploration
Administration

EWEllis/gla 3-20-52
cc to: Adm. Reading File
✓Docket
Mr. Ellis
Field Team, Region V (2)

MARTIN W. BELL
MELVILLE EHRLICH

LAW OFFICES
BELL AND EHRLICH
COMMONWEALTH BUILDING
WASHINGTON 6, D.C.

TELEPHONE
EXECUTIVE 1570

March 14, 1952

DMA-654X
IDM-E58

Frank E. Johnson, Acting Administrator
Defense Minerals Exploration Administration
United States Department of the Interior
Washington 25, D. C.

Dear Mr. Johnson:

On December 14, 1951, you advised us that you had not yet received a report from your field team working on the exploration of the Keenan Properties in Lawrence County, South Dakota. I assume that by this time you have been in receipt of a report from your field team and if you can make this report available to us, I will appreciate your sending us a copy.

Not available

Very truly yours,

Martin W Bell

Martin W. Bell

MWB/ydm

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 17 1952

FILE COPY
SURNAME:
800

Talbert

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

March 20, 1952

Mr. Robert M. Hull
General Delivery
Rapid City, South Dakota

Dear Bob:

Please contact Mr. Donald H. Mullen, Supervising Engineer, Bureau of Mines, School of Mines Campus, Rapid City, South Dakota, re arrangements to audit records of Keenan Properties on project Contract IDM-K-58.

This contract permits for Phase I, the only performance authorized, total costs of $19,000.00 with Government participation of 90%. Mr. Needham (or possibly Mr. Mullen) is holding up payment of final MF-104 pending audit. From a comparison of the MF-104s for the period of July 16 to September 15, 1951 with the contract it appears that some unauthorized, as well as excessive, costs have been charged even prior to the final payment.

There follows a summary of the costs on the two month's MF-104s paid to date with certain notes relative thereto:

Item	Contract Estimates	MF-104 7/16-9/15		Balance Claimable
*Wages and Salaries	$10,800.00	$ 5,724.33		$5,075.67
Equipment Purchases	-	1,532.28	(A)	-1,532.28
Equipment Rental	2,700.00	5,097.50	(B)	-2,297.50
Supplies	(5,500.00)	1,045.15)	(C)	3,161.28
Other		1,293.57)		
Total	$19,000.00	$14,692.83		$4,407.17
*1 Jig Man @ $400 per mo.	($ 800.00)	$ 335.40)	(D)	$ 129.20
1 Sampler @ $400 per mo.	( )	335.40)		
6 Helpers @ $1.15 per hr.	1,500.00	601.29		898.71
1 Tr. Driver @ $350 per mo.	350.00	574.99	(E)	-224.99
1 Manager	1,000.00	538.00	(D)	462.00
1 Engineer	3,000.00	3,075.00		-75.00
1 Camp & Board @ $150 p/mo.	1,250.00	264.25	(F)	985.75
Travel-Three Men	2,400.00	-		2,400.00
General Supervision, etc.	500.00	-		500.00
Total	$10,800.00	$ 5,724.33		$5,075.67

(A) Since no equipment purchases were provided, if these charges are such they should be disallowed, unless contract is amended.

DL

(B) Excess possibly should be disallowed; also check period of rental of drag-line (used in lieu of bulldozer, per amendment); a portion of excess if due to rental of car and pickup (per amendment) may be allowable.

(C) Includes "telephone and telegraph" and "travel" which may be "indirect" costs and therefore not allowable; "travel" may be part of "Travel-Three Men $2,400.00" shown on Exhibit "A" and, if so, of course is allowable.

(D) Titles differ between contract and MF-104, but this is presumed to be the intent.

(E) Excess should be disallowed per Art. 8 of contract.

(F) Contract provides for $1,250.00 maximum allowance to employees in lieu of board and lodging, whereas MF-104 includes charges as follows for Camp and Boarding House:

Wages	$ 264.25
Equipment	227.57
Supplies	563.11
Other	110.00
	$1,164.93

It appears, if these charges are to be allowed, contract will need to be amended.

All of the above are just points of question that appear from a perusal of the "bare" MF-104s on file in this office and are listed merely to give you an indication of possible trouble spots. Basically, however, as you probably recall, the engineer (a Mr. Johnson) is pushing Mrs. Keenan for payment of his fees, which include expenses both prior to the contract date and after the termination date as well as indirect costs not allowable under the contract. To further his claim Mr. Johnson is withholding the final engineering report. Mr. Needham will not pay the final MF-104 until receipt of the report as required by Art. 14 of the contract. Mrs. Keenan claims she can't pay Mr. Johnson until the Government pays her. So — quite an impasse!!

There is a possibility of an out which you should keep in mind as a final resort. An assignment to Mr. Johnson of any balance due Keenan Properties under this contract can be effected, thereby guaranteeing to Mr. Johnson the payment of at least that amount. However, any such assignment of this contract must be effected by the Administrator, as such authority has not been delegated to the Executive Officers.

Best of luck,

/s/ Talbert

J.N.
3-20-52

EDTalbert/wb
March 20, 1952

Copy to: Mails & Files

FILE COPY
SURNAME:

Chambers wb

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

D. M. E. A.

800
Jay L. Chambers
3461 2612

1420137 Salaries & Expenses, Defense Production Activities, Interior, 1952

Mr. A. B. Needham, Executive Officer, 2908 Colfax Avenue, South
Minneapolis 8, Minnesota

Re telephone conversation March 17 Keenan Properties. Mrs. Keenan did not contact my office. Hull of my office will be in Rapid City March 31. Please see that contract and 104 reports are available in Rapid City. Hull will contact Mullen. Please notify Keenan of this proposed audit.

N.S
R&R

Jay L. Chambers, Chief
Contract Administration and
Audit Division

JLChambers/wb
March 20, 1952

Copy to: DMEA Mails & Files
Mr. Chambers

pd

FILE COPY
SURNAME:

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

D. M. E. A.

800
Jay L. Chambers
3461 2612

1420137 Salaries & Expenses, Defense Production Activities, Interior, 1952

Mr. Robert M. Hull, C/O Mr. A. E. Weissenborn, DMEA Field Team, Region II
South 157 Howard Street, Spokane 8, Washington

Can you be in Rapid City, South Dakota, Monday, March 31 to audit and discuss Keenan Properties, Contract E-58 with Field Engineer. Wire reply immediately and we will mail further information.

(Signed) J. L. Chambers

cc 3/19

Jay L. Chambers, Chief
Contract Administration and
Audit Division

JLChambers/wb
March 19, 1952

Copy to: DMEA Mails & Files
Mr. Chambers

KEENAN PROPERTIES, INC.

SPEARFISH, SOUTH DAKOTA

TIN
COLUMBIUM-TANTALUM
TUNGSTEN
GOLD

TELEPHONE
SPEARFISH 2F14

3/10/52

Mr. A.B. Needham, Chief,
Bureau of Mines,
Minneapolis.
Minnesota.

Dear Mr. Needham:

I have your letter of March 5, for which thanks. Naturally, I am anxious to wind up Phase I. and in order to do so we must have the settlement. I have finished all the documents which have been requested, to the best of my ability, but any additional financial data required will be forthcoming on request as my books are quite complete.

I judged from Mr. Mullen's letter that the final check would be mailed as soon as my signed report was received, five copies of which were transmitted to him on February 28th. 1952.

Regarding the third paragraph of your letter which refers to Article 14 of the contract, you will recall that my agreement with DMEA was to the effect that the Walter Johnson Company would furnish the geologic and engineering report. This has understandably been held up pending the final payment of Mr. Johnson's fee, which payment is dependent upon the DMEA settlement to Keenan Properties. I feel certain that as soon as we receive your check and in turn pay Walter Johnson, DMEA will promptly have his report.

Very truly yours,

Peggy Keenan
d/b/a/ Keenan Properties.

cc/ Mr. Walter W. Johnson,
Mr. D.H. Mullen,
Mr. C.O. Mittendorf

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.
Region V
2908 Calfax Avenue South
Minneapolis 8, Minnesota

March 6, 1952

Memorandum

To: Donald H. Mullen, Supervising Engineer, Bureau of Mines, School of Mines Campus, Rapid City, South Dakota

From: Executive Officer, Field Team, Region V

Subject: Docket DMEA-654x, Contract Idm-158
Keenan Properties, Inc.

The subject contract does not provide for the purchase of any equipment, and yet on the 8/16-9/15 operator's monthly report voucher there is an item of $1,490.75 listed for equipment purchased.

Article 7 of the contract provides that all equipment costing over $50 each paid for or purchased with funds contributed jointly by the operator and the Government shall belong to the operator and the Government jointly, in proportion to their respective contributions; and upon termination of the contract, if they have any salvage value, shall be disposed of for their joint account, unless the Government, in writing, waives its interest in any such items.

DMEA Circular 10 directs an inventory of such items and an appraisal and recommendation for suitable disposition, and that final voucher payment, at least in a sum equal to a rough estimate of the items, be held pending settlement of the items.

Please advise if such equipment was purchased and, if so, furnish a list with approximate value.

A. B. Needham
Executive Officer
Field Team, Region V

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 10 1952

ABNeedham:dt
cc Dutton
Reddan
DMEA (Wash) 2
Region V
files
df

bd

FILE COPY
SURNAME:
800

Chamber

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

FEB 8 1952

Mr. A. B. Needham, Executive Officer
DMEA Field Team, Region V
Defense Minerals Exploration Administration
2908 Colfax Avenue South
Minneapolis 8, Minnesota

Dear Mr. Needham:

Reference is made to your memorandum of January 24, 1952, in regard to Contract IDM-E-58 with Keenan Properties, Inc. The question arises as to whether we should have an audit made of the Keenan Properties to determine if the Government's interest under the contract is being violated.

As you know we have recently established a Contract Administration and Audit Division and we are attempting to get well-trained and experienced auditors to go out into the field and audit the books of contractors for two purposes: (1) to reduce the amount of documentation now required of contractors in support of their vouchers; and (2) to better protect the interest of the Government.

It is now planned that some time during the week of February 18, 1952, Mr. E. D. Talbert, Assistant Chief of the Contract Administration and Audit Division, and Mr. Kenfield Bailey, Budget and Finance Officer of the Bureau of Mines, will stop over in Minneapolis on their way to Spokane, San Francisco, Denver, and other Regions. At this time you may wish to discuss with these gentlemen the contract with the Keenan Properties, as well as other problems which you may have.

You will be informed later by wire as to the exact day Mr. Talbert and Mr. Bailey will arrive in Minneapolis.

Sincerely yours,

C. O. Mittenderf (for)

Acting Administrator
Defense Minerals Exploration
Administration

R.H.
2-8-52

JLChambers/wb
February 8, 1952

Copies to: Mails & Files
Admin. Reading File
Mr. Chambers

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
~~WASHINGTON 25, D. C.~~
Region V
2908 Calfax Avenue South
Minneapolis 8, Minnesota

Dmea 654

February 25, 1952

Miss Peggy Keenan
c/o Jefferson Hotel
Washington, D. C.

Dear Miss Keenan:

Reference is made to your letter of February 21, 1952, inquiring about correspondence we had regarding a Mr. Nemeroff's connection with your property.

On December 14, 1951, we had a letter from the Washington office of DMEA advising they had correspondence from Martin W. Bell, an attorney of Washington, on behalf of Arnold Maremont, David Bright, and Vistor Nemeroff, who stated they were owners of 31-2/3 percent of certain properties in Lawrence County, S. Dak., and Crook County, Wyo., and wondered if that property was involved in the exploration contract.

We wrote back to our Washington office and advised them the exploration on our contract with you was on 10 claims, all either owned or leased to you at the time the contract was signed in July 1951. That was supported by your statement and owners agreement of subordination attached to contract. Since we did not have the claim name or number that Nemeroff et al was supposed to have an interest in, we were unable to check other than to say our records indicate they were not involved. We did note the sale (Nemeroff claimed) was consummated on October 30, 1951, nearly four months after the contract was signed. The existence of the collateral note of November 12, 1945, (mentioned by Nemeroff) apparently was not mentioned in July 1951.

Other than the above, we know nothing about Nemeroff or his connection with any of the properties in South Dakota.

Mr. Mullen is now reconciling the material you gave him to process the final voucher.

RL

A copy of your letter, together with this answer, is being sent him.

We are sorry there has been such confusion and complications about the final voucher; but under the circumstances, it could not be avoided.

Sincerely yours,

A. B. Needham
Executive Officer
Field Team, Region V

ABNeedham:dt

cc Dutton
Mullen
DWRA, Wash.
Region V
files
df

FILE COPY
SURNAME 100

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

Memorandum for the Files January 24, 1952

Subject: DMA-653X - Keenan Properties (Beryl
(Peggy Keenan)
Spearfish, South Dakota

On several occasions Bill Broadgate, of Senator Murray's office, has called me with respect to the delay in making final payment covering the first phase of the subject project. Results of the first phase were unsatisfactory. It is my understanding that there is no probability of approving additional work. Broadgate alleges that the Regional Office is withholding payment of $6000 which represents the total amount of the last voucher. He states that, since this case is a 90-10 proposition, the withholding of funds has resulted in undue hardship to the operator.

I have discussed the case with Mr. Paul Zinner, here in Washington, and by phone with Al Needham in Minneapolis. I have been informed by Needham that many discrepancies were found in the operator's last report which must be reconciled before any payment can be made. His office has attempted to contact the operator in the matter and has addressed her at an address in Palo Alto, California, which she had given. They have been unable to contact Miss Keenan and, consequently, must delay further action until she replies to their letters.

I am informed further that Mr. Walter Johnson, who was approved as Consultant for the exploration project, is likewise attempting to contact Miss Keenan. He endeavored to reach her at the same address by telephone and was informed that she was unknown. Mr. Johnson has prepared the final report on the project, which is necessary and due in accordance with the terms of the exploration contract. He has not, however, been paid for his services and does not intend to surrender his report until payment for professional services has been received. Mr. Johnson's total bill for services rendered, including the preparation of the final report, is stated to be $7,002.57. Mr. Needham's office informs me that his office has already honored and paid to Miss Keenan the sum of $7325, earmarked for services rendered by Mr. Johnson. It is understood that Miss Keenan passed on only $4000 of this amount to Mr. Johnson.

I transmitted this information to Bill Broadgate and conveyed to him my astonishment of his continual pressing of this case in light of these facts. I told him it was the decision of the Regional Office that the matter of the final payment would remain in abeyance until Miss Keenan contacted their office. I told him that I concur with that decision.

Broadgate stated that he was not needling me in behalf of Peggy Keenan, but was endeavoring to find out why his friend, Walter Johnson, had not been paid. He was surprised at Miss Keenan's conduct and indicated that he would contact her partner who is financing the operator's share of the cost of the project.

C. O. Mittendorf (fw)

COMittendorf/fw

cc: Mr. Tom Lyon, DMPA
Mr. ~~L.G.Houk~~ E.W. Ellis
Mr. S. Needleman, Rm1347
Mr. J. J. Norton, Rm.G-228 GSA Bldg.
Admr. Reading File
Docket File

OFFICE OF THE ADMINISTRATOR

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
~~WASHINGTON 25, D.C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

Department of the Interior
Defense Minerals Administration
RECEIVED
JAN 28 1952

January 24, 1952

Memorandum

To: C. O. Mittendorf, Administrator, DMEA, Interior Building, Washington 25, D. C.
Through: Operating Committee

From: Executive Officer, DMEA Field Team, Region V

Subject: Docket DMA-654x, Contract Idm-E58
Keenan Properties, Inc.
Spearfish, South Dakota

Pursuant to our telephone conversation of January 23, 1952, on the voucher situation of the subject docket and to supplement our transmittal on January 23, 1952 of copies of the two monthly reports received to date and for which payment has been made, there are attached copies of correspondence pertinent to the third and final voucher.

It will be noted that on previously paid vouchers the Government has reimbursed Keenan Properties in the amount of $7,325.41 which apparently was supposed to pay the superintendent, W. W. Johnson, for his services; but according to Johnson, he has received only $4,000.00. We do not know if the balance has been misappropriated or not, but we believe a factual and full accounting, together with evidence of payment of certain costs incurred, will have to be made before we can approve the final voucher.

Since talking with you, I have learned that Miss Keenan has been in touch with our Rapid City field office and our people are trying to reconcile the account.

The attached papers are for your information and record.

A. B. Needham
Executive Officer
DMEA Field Team, Region V

2965

Attachments

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION
WASHINGTON, D. C.
2908 Colfax Avenue South
Minneapolis 8, Minnesota

Defense Minerals Administration
RECEIVED
JAN 28 1952

January 24, 1952

Memorandum

To: Donald H. Mullen, Supervising Engineer, Bureau of Mines, School of Mines Campus, Rapid City, South Dakota

From: Executive Officer, DMEA Field Team, Region V

Subject: Docket DMA-654x, Contract Idm-158
Keenan Properties, Inc.

Reference is made to Mr. Lewis' memorandum, dated January 8, 1952, regarding approval of the last Keenan monthly report.

I am in accord that payment of the last voucher should be held in abeyance until such a time as discrepancies can be reconciled with Miss Keenan. In view of the Johnson statement of account with Keenan to the effect that he had been paid only $4,000.00 and our information indicated she had paid him $7,325.41, and his request to hold the voucher until differences had been reconciled, it hardly permitted us to process the last payment.

Have you heard from her or have you learned further of her whereabouts?

Considerable discussion of the Keenan dealings and project in general emanates from various sources in Washington. We have had many inquiries as to the status of the accounting and I do not quite understand the pressure at times.

It appears a rather broad interpretation of the contract and terms of payment have been made, and we are entirely justified in requiring statements of costs incurred before further payment.

A. B. Needham
Executive Officer
DMEA Field Team, Region V

P.S. Since writing this, I have talked with you and know you now are in touch with Miss Keenan and trying for a reconciliation of the account. This letter is for the record anyway.

Needham:dt
cc Dutton
Redden
Mittendorf
Region V
files, df

COPY

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 2 8 1952

Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

January 8, 1952

Memorandum

To: Donald H. Mullen, Supervising Engineer, Bureau of Mines, School of Mines Campus, Rapid City, South Dakota

From: Executive Officer, DMEA Field Team, Region V

Subject: Docket DMA-654x, Contract Idm-E58 - Payment of project charges Keenan Properties

Reference is made to your memorandum of January 3, 1952 subject as above.

Mr. Needham is absent at present, but will return to this office on Friday of this week. Until his return, I suggest that you make no approval of "costs incurred" without "receipted bills showing payment of costs." Circular letter No. 11 covers fully the payments to operators under exploration project contracts. As I interpret the circular, the payment of "costs incurred" is all right as long as the operator is proving to be reliable; but if an unreliable operator is encountered, and there are indications that the funds are being misapplied, payment should wait until "receipted bills showing payment of costs" have been received.

As I understand, your records show that $7,325.41 has been paid the Walter W. Johnson Co. In contrast, Johnson has received only $4,000; at least, it has been so stated by a letter from that company. Under such circumstances, there is only one conclusion to reach until it has been proved wrong: $3,325.41 of the funds paid by the Bureau to the Keenan Properties under "costs incurred" have been misapplied by the operator. No further payments should be made until the situation is cleared up. Neither should any "costs incurred" items be approved for payment until "receipted bills showing payment of costs" have been received.

I am certain that Mr. Needham will concur with the above statements; but to make certain that he is in full agreement, I will present all data to him, including this letter, upon his return. If he is in disagreement, you may rest assured that he will notify you immediately, either by mail or telephone.

In the meantime, I suggest that you continue to wait for the "costs incurred" material from Miss Keenan. By the time you receive this material, Mr. Needham will have returned, and you should receive an answer to your problem either Friday by phone or Monday by letter.

For Executive Officer
/s/ Walter E. Lewis, Chief
Mineral Industry Survey Branch

COPY

Rapid City Field Office
School of Mines Campus
Rapid City, South Dakota

January 3, 1952

Memorandum

To: A. B. Needham, Executive Officer, DMEA Field Team, Region V

From: Supervising Engineer, Rapid City, Field Office

Subject: Keenan Properties, DMA 654X, Contract Idm E-58
Payment of project charges to Walter W. Johnson Co.

Attached are copies of a letter from Walter W. Johnson, a statement of his account with Keenan Properties, and my answer.

I am withholding approval of any part of the final report by Keenan Properties for reimbursement of expenditures pending receipt of supporting evidence of expenses, such as invoices, payrolls, and similar material. I have had no answer to my request to Mis s Keenan for the missing material. Further, I can see no way in assisting the Walter W. Johnson Company in obtaining payment of their account.

In a telephone conversation some months ago with Weston Bourret regarding the project, I specifically asked about the approval of expenditures not provided for in the contract and was advised that they should be suspended. I have been quite liberal in my interpretation of the contract so far, but there is a limit.

According to my figures, Keenan Properties have paid or have indicated as being paid the following amounts to Walter W. Johnson Company in various monthly reports:

Monthly Report from July 16 to August 15, 1951	$3,000.00
Monthly Report from August 16 to September 15	2,987.01
Monthly Report from September 16 through September 22 when the project was terminated	1,338.40
	$7,325.41

There will be some minor adjustments because of reversals and substitution of actual for estimated costs. The above figures do not include $997.56 in expenditures that have been suspended. Of the total amount Keenan Properties has been reimbursed for 90 percent of $5,987.01 included in the monthly reports from July 16 through September 15, 1951.

If you have a more liberal interpretation of the contract please advise both Mr. Johnson and me. He is a first class man and probably would not have become involved except for the insistence of Carpenter of G.S.A. who insisted that Johnson be employed. At the same time, I am somewhat surprised that a man of his caliber and experience should take the job without a more definite understanding with Miss Keenan.

/s/ D. H. Mullen

COPY

Rapid City Field Office
School of Mines Campus
Rapid City, South Dakota

January 3, 1952

Mr. Walter W. Johnson, President
Walter W. Johnson Company
351 California Street
San Francisco 4, California

Dear Mr. Johnson:

I have your letter regarding payment of your charges against Keenan Properties.

The final report of expenditures on Phase I of the exploration project has not yet been completed. Provisions of the act establishing the exploration program provide for reimbursement to the operator for expenses within the contract. The function of the Bureau of Mines in the program is primarily to observe the work and approve the expenses incurred according to the contract.

We are permitted to alter some provisions of the contract by amendment as long as the funds allotted for the work are not exceeded. Any expenditures over and above the limit provided are and must remain the responsibility of the operator. Neither are we permitted to withhold payment of approved expenditures for the benefit of any creditor.

The approval or disapproval of your traveling expenses in connection with the project prior to signing of the contract is not a debatable question as the contract forbids payment of expenses incurred before the date of the contract unless expressly allowed in the contract. Likewise, similar expenses incurred after the date of the contract have been suspended because they do not come within the terms of the contract as written and not because of any arbitrary position on my part.

I am transmitting your letter and statement of account to our Minneapolis office for additional interpretation of the contract and its provisions.

Very truly yours,

/s/ D. H. Mullen
Supervising Engineer

COPY

WALTER W. JOHNSON COMPANY
351 California Street
San Francisco 4, California

December 27, 1951

Donald H. Mullen, Supervising Engineer
U. S. Bureau of Mines
Rapid City, South Dakota

Dear Mr. Mullen:

On December 6 we mailed to the firm of W. A. Rich, Public Accountants, Deadwood, South Dakota, three statements of our account with the Keenan Properties and we asked Mr. Thompson of that firm to mail a copy to you. On the assumption that you did not receive a copy of this statement, we are enclosing three additional copies with the request that you send one copy of this statement to your Minneapolis office, asking that the Bureau of Mines not make the final payment to the Keenan Properties until your department has assurance that the balance of our account will be paid, as far as possible, from the funds still remaining in the hands of the Bureau of Mines. As you will note, our office received a $1500.00 payment on July 31, and then on December 3 a further payment of $2500.00 was received. I have never seen a statement of the expenditures submitted to you by the Keenan Properties, but I am of the opinion that the $2500.00 does not represent the full amount which should have been paid to us from monies received by Keenan Properties from the Bureau of Mines. If it is in order, I should like to receive a copy of the statement of expenditures which Keenan Properties has rendered to your department.

In one of our recent conversations you stated that you could not allow my traveling expenses to the Black Hills prior to the date of signing the contract. I believe this is an unjust position to take for the reason that at the time I went into the Black Hills I had no way of knowing such a claim would not be allowed, and my first trip to the Black Hills was discussed with Mr. Weston G. Bourret in his office in Washington prior to my departure from that city. He suggested I stop and see the Fan Steel people as I passed through Chicago and, since a certain sum was set up to cover traveling expenses, and this amount had not been exceeded by myself or any of my men, I can see no reason why the traveling expense should not be paid. Also, I might add that the amount of the traveling expense charged is really less than what could have been charged, as I prorated a part of the expense against other business that I had in Washington.

As an additional precaution we have asked our attorney, Mr. John M. Costello, to file a lien against the Keenan Properties and the properties which are under lease to them, but we should like to have assurance, if possible, from your department that no further monies will be paid to the Keenan Properties until you have positive evidence that we have been paid the balance due us.

Kindest person regards.

Very truly yours,
WALTER W. JOHNSON COMPANY
/s/ Walter W. Johnson
Walter W. Johnson
President

COPY

Walter W. Johnson Company
351 California Street
San Francisco, California

December 5, 1951

In account with
Keenan Properties, Spearfish, South Dakota

Date				Dr.	Cr.
Balance per Statement October 5, 1951				$6,235.69	
Oct. 10, 1951		Western Union - September		13.95	
	17	Reversing estimated expenses:			258.00
		Pacific Pump Co. - rental	108.00		
		Freight on machinery returned	150.00		
	17	Freight paid Pacific Intermountain Express on return of machinery & equipment from Spearfish		90.80	
	23	Whitney & Baird - premium on Workmen's Comp. Insurance		11.00	
Nov.	8	Western Union - October		3.31	
	8	Telephone charges		2.25	
	16	Pacific Pump Co. - rental of pump - 9.7/51 to 10/16/51		140.40	
	16	Return freight on pump		72.84	
Dec.	3	Western Union - November		6.94	
	3	Cash received on account			2,500.00
		Balance			3,819.18
				$6,577.18	$6,577.18
				$3,819.18	

COPY

Walter W. Johnson Company
351 California Street
San Francisco, California

October 8, 1951

In account with
Keenan Properties, Spearfish, South Dakota

Date		Dr.	Cr.
Balance as per statement of September 5, 1951		$5,484.57	
Sept. 7, 1951	Western Union - August	15.99	
11	Gold Hill Dr. Co. - equip, rented September	160.00	
13	Refund on baggage - Schifferle		4.48
20	Stationery - Wobbers - for shipping tags	3.46	
20	Blueprints	1.49	
28	Cancelling salary - L. H. Petersen		335.40
28	" " - J. B. McAlister		335.40
30	Reversing charge Sept. 5 for cash advanced to C. J. Schifferle by Petersen		30.00
Oct. 3	Traveling expenses - J. B. McAlister	13.46	
3	Hotel - Stockton - " "	4.00	
8	Salary - C. J. Schifferle - covering time spent at Black Hills & additional time to be spent in assisting in completion & writing of report (amount by agreement)	1,000.00	
8	Pacific Pump Co. - rental of 4" pump	108.00	
5	Freight on equipment returned to Gold Hill Dr. Co. (estimated)	150.00	
	Balance		6,235.69
		$6,940.97	$6,940.97
Oct. 8	Balance due	$6,235.69	

NOTE: Copies of commercial invoices forwarded with previous statement to Mrs. Keenan.

COPY

Walter W. Johnson Company
351 California Street
San Francisco, California

September 5, 1951

In account with
Keenan Properties, Spearfish, South Dakota

Date		Dr.	Cr.
July 31, 1951	Cash received on account		$1,500.00
Aug. 3	Advance for expenses - L. H. Petersen	$ 150.00	
7	Telephone charges - June & July	14.25	
10	Harron, Rickard & McCane Co.	74.88	
14	Gold Hill Dredging Co.	260.00	
14	Pacific Intermountain Express	148.53	
20	Blueprints - July	.81	
20	John A. Roebling's Sons Co.	14.09	
20	" " " "	36.65	
24	Braun-Knecht-Heimann Co.	4.01	
24	Dunham, Carrigan & Hayden Co.	3.14	
24	" " " "	10.81	
31	Salary - L. H. Petersen - Aug. 6-31, 1951	335.40	
31	" - J. B. McAlister- " " "	335.40	
31	Drafting time - July - 10 hrs. at $3.00	30.00	
31	McDonough Steel Co.	168.80	
31	" " "	1,038.99	
31	Braun-Knecht-Heimann Co.	29.00	
31	" " " "	9.53	
31	J. L. Stuart Mfg. Co.	62.26	
31	W. W. Johnson Co., Stockton	50.00	
31	" " " "	40.00	
31	Log books - 2 at $3.00	6.00	
31	Airplane ticket - S.F. to Cheyenne - Aug. 9 - C. J. Schifferle	140.07	
31	Drivurself, Inc. - Cheyenne - car rental - 8/11	100.00	
31	Refund on above - 8/14		12.08
31	Journalizing, traveling & misc. expenses - W. W. Johnson - Washington, D.C.-Chicago-Rapid City - June 29, 1951 (detail attached)	190.74	
31	Journalizing, traveling & misc. expenses - W.W. Johnson - August trip (detail attached)	117.42	
31	W. W. Johnson - 2 round trips S.F.-Rapid City - June, August	389.40	
31	Indicental expenses - W.W. Johnson - Washington, D.C., etc. - incurred for your account (hotel, meals, etc.)	150.00	
31	Engineering fee	3,000.00	
Sept.5	Cash advanced to C. J. Schifferle for expenses - by W. W. Johnson 50.00 L. H. Petersen 30.00	80.00	
5	Amount refunded by C. J. Schifferle		35.47
5	Telephone charges - August	41.94	
	Balance		5,484.57
		$7,032.12	$7,032.12
	Balance to date	$5,484.57	

Date		Dr	Cr.
Known Future Payments:			
Salary, C. J. Schifferle, covering time spent at Black Hills & additional time to be spent in assisting in completion and writing of report (amt. by agreement)	1,000,00		
Rental of pumps & jigs for September	160.00		
Rental 4" suction pump - 1 month (shipped by Pacific Pump Co.)	108.00		
Freight to & from Oakland - 4" pump	150.00		
Estimated miscellaneous items	100.00	1,518.00	
		$7,002.57	

NOTE: Copies of commercial invoices forwarded with previous statement to Mrs. Keenan.

COPY

Rapid City Field Office
School of Mines Campus
Rapid City, South Dakota

December 26, 1951

Memorandum

To: A. B. Needham, Executive Officer, DMEA Field Team, Region V

From: Supervising Engineer, Rapid City Field Office

Subject: Keenan Properties, DMA Docket No. 654X, Contract Idm E-58

Reference is made to your memorandum of December 18 on the subject contract.

According to available maps, exploration work was done on the following claims:

Boston No. 5, M.S. 1853
Elizabeth No. 8, M.S. 1853
Elizabeth No. 12, M.S. 1853
Gold Bond
Oms, M.S. 1879
Belmont
Belmont 1
Belmont 4
Parrot No. 3
Placer Survey 392

All of these claims were either owned or under lease to Peggy Keenan at the time the contract was signed in July 1951. This is supported by the operator's statement and owners agreements of subordination attached to the contract.

Since the data contained in your letter do not designate any particular claims by name or number, it is impossible to say whether or not the interests of Messrs. Maremont, Bright, and Nemeroff are valid. It is further noted that the sale was apparently consummated on October 30, 1951, which was nearly 4 months after the contract was signed. The existence of the collateral note of November 12, 1949 apparently was not mentioned in July of this year.

As you know, the field work was stopped on September 22 and consideration of Phase II has been delayed pending receipt of Walter Johnson's report, as provided for in the contract. The report has not been received and from information at hand I have some doubt if it will

be received until Miss Keenan makes some sort of a settlement with the entineer regarding payment of expenses and fees. Monthly reports indicate payments have been made, but I am advised differently. It might further interest you to know that Miss Keenan gave me a Palo Alto, California, address where she could be reached during the past few weeks and a letter of mine to that address has neither been acknowledged nor returned. Walter Johnson called me regarding the project and I gave him Miss Keenan's address. He later advised me he attempted to call her there and was informed that she was not there and that they had never heard of her. You can draw your own conclusions.

The status of Phase II is still undetermined for reasons previously mentioned. I do have some advance information and off the record it would appear that field work at the project is completed as far as my approval for continuation is concerned.

/s/ D. H. Mullen

OFFICE OF THE ADMINISTRATOR

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
~~WASHINGTON 25, D.C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

RECEIVED
JAN 1 - 1952
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

December 28, 1951

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 2 - 1952

Mr. Frank E. Johnson
Deputy Administrator
Defense Minerals Exploration Administration
Interior Building
Washington 25, D. C.

Keenan Properties

Dear Frank:

Reference is made to your letter of December 14, 1951, with attached correspondence regarding interests of Messrs. Maremont, Bright, and Nemeroff in certain lands pertinent to Docket DMA-654x, Contract Idm-E58, Keenan Properties, South Dakota.

We have been advised by our field team representatives at the job in South Dakota that exploration was done on the following claims:

Boston No. 5, M.S. 1853
Elizabeth No. 8, M.S. 1853
Elizabeth No. 12, M.S. 1853
Gold Bond
Oma, M.S. 1879
Belmont, Belmont No. 2, and Belmont No. 4
Parrot No. 3
Placer Survey 392

All of these claims were either owned or leased to Peggy Keenan at the time the contract was signed in July 1951. This is supported by operator's statement and owners' agreement of subordination attached to contract.

Since your letter did not indicate a claim by name or number on which Maremont, Bright, or Nemeroff was supposed to have an interest, it is not possible to check other than to say our record of claims indicate they were not involved. It is noted the sale was consumated on October 30, 1951, nearly 4 months after contract was signed. The existence of the collateral note of November 12, 1949, apparently was not mentioned in July 1951.

Field work on phase 1 was stopped September 22, 1951, and consideration of phase 2 has been delayed pending receipt of the operator's engineer report; and we have doubt that it will be forthcoming unless or until Miss Keenan makes a settlement with him, which to date has not been done. Keenan's last monthly operator report has not yet been approved for final payment by the field team. Miss Keenan is supposed to have gone to Palo Alto, California, but contact with her there has not been successful and we are advised she was not there nor have they ever heard of her.

Although phase 2 is yet undetermined unofficially, we can say as far as we are concerned the project is completed.

A. B. Needham
Executive Officer
DMEA Field Team, Region V

Ellis

Hold until Field Exec. Officer Region V, replies to F. Johnson's letter of Dec. 14. EBG 12/20/51

MARTIN W. BELL
MELVILLE EHRLICH

LAW OFFICES
BELL AND EHRLICH
COMMONWEALTH BUILDING
WASHINGTON 6, D.C.

TELEPHONE
EXECUTIVE 1570

December 17, 1951

Frank E. Johnson, Acting Administrator
Defense Minerals Exploration Administration
United States Department of The Interior
Washington 25, D. C.

Keenan Properties

Dear Mr. Johnson:

Thank you very much for your letter of December 14, 1951, with respect to the interest of Arnold H. Maremont, David E. Bright, and Victor Nemeroff in the Keenan properties located in Lawrence County, South Dakota, which are the subject of Exploration Project Contract bearing Docket No. DMA-654X, Contract Idm-E58.

When you have a report of progress from your field team, I will be very grateful to you if you will advise me of the status of the matter.

Very truly yours,

Martin W. Bell

Martin W. Bell

MWB/ydm

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 18 1951

FILE COPY
SURNAME:

Hofflund
Ellis
F E Johnson

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

DEC 14 1951

Mr. Albert B. Needham
Executive Officer
DMEA Field Team, Region V
~~426 Plymouth Building~~ 2908 Colfax Avenue South
Minneapolis, Minnesota

Dear Mr. Needham:

Reference is made to Docket No. DMA-654X (Contract Idm-258), Peggy Keenan.

Enclosed is a copy of a letter of December 4 from Martin W. Bell, an attorney of this City, to DMA, claiming in behalf of his clients there named a certain adverse interest in the property which is the subject of the Exploration Project Contract. Also enclosed is a copy of the reply of DMEA to Mr. Bell.

The copies of instruments submitted by Mr. Bell do seem to support his contentions with respect to some of the claims which are included in the Exploration Project Contract. Please report the present status of the work and what significance is to be attached to Mr. Bell's representations. If the work under Phase I of the contract is completed or about to be completed, and no further work is to be done, the matter would seem to be of small significance. On the other hand, if extensive further operations are to be carried out, and the property indicated by Mr. Bell will be involved, the matter of title should be cleared up before the Government makes further contributions to the work.

Sincerely yours,

(signed) FRANK E. JOHNSON (fw)

Acting Administrator

F.W. 12-14

Enclosures
JLHofflund/bjl (written 12/12/51)
Copy to: Repts. & Records
Admin. Reading File
J. L. Hofflund
R. R. Guthrie
C. O. Mittendorf
Chron.
Pending

BE

FILE COPY
SURNAME:

140

UNITED STATES
DEPARTMENT OF THE INTERIOR
Exploration
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

Hofflund
Elis
Hefelman

DEC 14 1951

Mr. Martin W. Bell
Bell and Ehrlich
Commonwealth Building
Washington 6, D. C.

My dear Mr. Bell:

Receipt is acknowledged of your letter of December 4 to the Defense Minerals Administration and to the General Services Administration advising the Government that Arnold H. Maremont, David E. Bright, and Victor Nemeroff have an interest adverse to that of the Government and Peggy Keenan in certain property in Lawrence County, South Dakota, which is the subject of an Exploration Project Contract between Peggy Keenan and the Government. (Docket No. DMA-654X, Contract Idm-E58). We thank you for the information.

This office does not have any information as to the progress of the work under the Exploration Project Contract. When we have a report of progress from the field team, we will advise you further if you are still interested.

Sincerely yours,

(signed) FRANK E. JOHNSON (fw)

Acting Administrator

F.N. 12-14

Copy to: Reports & Records
Admin. Reading File
J. L. Hofflund
R. R. Guthrie
C. O. Mittendorf
Chron.
Pending

JLHofflund/bjl (12/12/51)

BE

Dma 654

LAW OFFICES
BELL AND EHRLICH
COMMONWEALTH BUILDING
WASHINGTON 6, D.C.

MARTIN W. BELL
MELVILLE EHRLICH

TELEPHONE
EXECUTIVE 1570

December 4, 1951

DEPARTMENT OF THE INTERIOR
RECEIVED
DEC 7 1951
Defense Minerals Administration,
Production Expansion Division

Defense Minerals Administration
General Services Administration
Washington 25, D. C.

Gentlemen:

We understand that your administration has entered into an exploration contract with Peggy Keenan Stanwell-Fletcher with respect to certain properties located in Lawrence County, South Dakota, and Crook County, Wyoming.

This is to advise you that Arnold H. Maremont, David E. Bright, and Victor Nemeroff are the owners of an undivided 31 2/3 per cent of such properties as described in a certain collateral note dated November 12, 1949, and sale thereupon made on October 30, 1951, as is more fully set forth in copies of said collateral note and notification of sale attached hereto.

We will appreciate your immediate cooperation in advising us of the extent to which said properties have been explored under your agreement and the extent of income derived therefrom to this date. This will also serve to place your administration upon notice of the interest of said Arnold H. Maremont, David E. Bright, and Victor Nemeroff in said properties.

Very truly yours,

Martin W Bell

Martin W. Bell

MWB/ydm

Encls.

(Via registered mail)

RECEIVED
DEC 10 1951
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

600

FILE COPY
SURNAME:

Blakemore
Mittendorf

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

AIR MAIL

SEP 18 1951

Mr. A. B. Needham
Executive Officer, Region V
2908 Colfax Ave., South
Minneapolis, Minnesota

Re: Docket No. DMA-654X
Keenan Properties
~~Exploration Project Contract~~
Idm-658
Amended Exhibit

Dear Mr. Needham:

Attached hereto is one copy of an amendment to subject Exploration Contract dated August 31, 1951, which has been approved by General Counsel.

As you did not designate in your forwarding letter of September 4, 1951, whether the sixth copy was returned to the Operator, or held for your files, the enclosed copy is for your disposition to the one lacking it.

Sincerely yours,

C. O. Mittendorf (NEH)

C. O. Mittendorf, Director
Production Expansion Division

J 79-18

Enclosure-1

PBBlakemore/jem
9/13/51

cc to: Adm. Reading File
Reports & Records
Messrs. Mittendorf, Olund
Mr. Blakemore
Docket

FILE COPY
SURNAME:

Mittendorf

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

SEP 18 1951

Contract Service Section
General Accounting Office
Washington 25, D. C.

Re: Docket No. DMA-654X, Tim
Keenan Properties
Exploration Project Contract
Idm-658
Amended Exhibit

Gentlemen:

Enclosed for recording in your office is the original of the amended Exhibit A to the Exploration Project Contract between the operator named in the above reference and the Government of the United States.

Sincerely yours,

C. O. Mittendorf (MAH) 9-18

C. O. Mittendorf, Director
Production Expansion Division

Enclosure-1

PBBlakemore/jem
9/13/51

cc to: Adm. Reading File
Reports & Records
Field Team, Reg. V
Messrs. Mittendorf, Olund
Mr. Blakemore
Docket

September 17, 1951

Mrs. Peggy Keenan
Keenan Properties, Inc.
Spearfish, South Dakota

Dear Mrs. Keenan:

I wish to acknowledge your letter dated September 11, also your telegram of September 16. Today I wired Larry as follows:

> WHEN SAMPLIN SHAFTS ON BEAVER WOULD LIKE AT LEAST TWO CUTS TAKEN IN EACH SHAFT. IF POSSIBLE CUTS TO BE MADE AT RIGHT ANGLES TO THE COURSE OF THE STREAM. PLEASE ADVISE MRS. KEENAN EACH TIME GOLD SAMPLES ARE WRIGHTED. REGARDS

In regard to getting out the report, it seems to me the time element depends on when we receive the assays, and I can assure you that the report will be completed and forwarded to you and to Mr. Mullen in just a few days thereafter. I sincerely hope the testing will show good results from the shaft on the high bar. If the shaft shows commercial values, then I beleive the Government would be justified in doing some extensive prospecting on this high channel. This prospecting can be continued next summer as well as the drilling on Sand Creek, as I think it would be toolate to send a drill in this fall unless the Government would come to an immediate decision about prospecting Sand Creek.

With respect to the equipment that was purchased by the Walter W. Johnson Company, when the prospecting is completed this becomes property of Keenan Properties, Inc., and the government, and I think the simplest way to handle the matter is to give Keenan Properties, Inc. and the Government a bill of sale of whatever equipment was purchased.

I may leave for Washington, D.C., next Sunday and would appreciate your calling me on the telephone at San Francisco as soon as convenient after receiving this letter.

With kindest regards.

Sincerely yours,

Walter W. Johnson Company

Walter Johnson
President

WWJ:C
cc: L. Peterson

FILE COPY
SURNAME:

Blakemore
Mittendorf

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

September 13, 1951

MEMORANDUM

To: Reports & Records Section

From: C. O. Mittendorf, Director
Production Expansion Division

Subject: Copy of amendment of Exhibit A
Docket No. DMA-654X, Idm-858
Keenan Properties
Spearfish, South Dakota

Enclosed for recording in your office is a copy of the amended Exhibit A to the Exploration Project Contract between the operator named in the above reference and the Government of the United States.

Attachment

C. O. Mittendorf (mtt)

PBBlakemore/jem

cc to: Adm. Reading File
Reports & Records
Messrs. Mittendorf, Olund
Mr. Blakemore
Docket

9/18

FILE COPY
SURNAME:

Blakemore
Mittendorf

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

September 13, 1951

MEMORANDUM

To: Chief, Finance Section

From: C. O. Mittendorf, Director
Production Expansion Division

Subject: Copy of amendment of Exhibit A
Docket No. DMA-654X, Idm-E58
Keenan Properties
Spearfish, South Dakota

Attached for recording in your office is a copy of the amended Exhibit A to the Exploration Project Contract between the operator named in the above reference and the Government of the United States.

9-18

C. O. Mittendorf (mat)

Attachment

PBBlakemore/jem

cc to: Adm. Reading File
Reports & Records
Messrs. Mittendorf, Olund
Mr. Blakemore
Docket

FILE COPY
SURNAME:
Guthrie

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

September 11, 1951

Memorandum

To: Director, Production Expansion Division

From: General Counsel

Subject: Keenan Properties, exploration contract
~~Docket No. DMA-654x~~

In accordance with the request of your memorandum of September 7, 1951, on this case, we have reviewed the amendment of August 31, 1951, to the subject exploration contract, which was attached to your memorandum, and find it satisfactory from the legal standpoint.

The file attached to your memorandum is returned herewith.

not stamped in R. + R.

J. L. Hofflund

J. L. Hofflund
General Counsel

Attachment

RRGuthrie/em

Copy to: Reports and Records
J. L. Hofflund
R. R. Guthrie

O.K.

400

FILE COPY
SURNAME:

Blakemore
Mittendorf

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

September 7, 1951

MEMORANDUM

TO: General Counsel

FROM: C. O. Mittendorf, Director
Production Expansion Division

SUBJECT: Docket DMA 654X, Idm-E58
Amendment - Exploration Contract

Attached hereto is:

Letter of September 4, 1951 from A. H. Needham transmitting 5 copies of an amendment to subject contract.

Your opinion of amendment is requested. Please return the above with your reply.

Attachments

C. O. Mittendorf (M.E.H.)

PBBlakemore/meh
cc to: Reports and Records
Messrs. Mittendorf, Olund
Mr. Blakemore
Docket

not stripped in R+R

a.e.

Mr. Ellis

DEPARTMENT OF THE INTERIOR
RECEIVED
SEP 7 1951
Defense Minerals Administration,
Production Expansion Division.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.
2908 Colfax Avenue South
Minneapolis 8, Minnesota
Region V

September 4, 1951

Memorandum

To: Tom Lyon, Chairman, Coordinating Committee, Defense Minerals Administration, Interior Building Washington 25, D. C.

From: A. B. Needham, Executive Officer - DMA Field Team, Region V

Subject: DMA Docket 654-X
Contract No. IDM-E58
Keenan Properties
Spearfish, South Dakota

In accordance with Circular Letter No. 9 which delegates Executive Officers of DMA Field Teams the authority to amend contracts, there are enclosed five copies of an amendment duly executed to DMA Docket 654-X, Contract No. IDM-E58, between the Government and Keenan Properties, Spearfish, South Dakota.

The reason these copies are forwarded to you is because Region V has not been delegated the authority to draw up contracts, and all copies except those going to the Operator and Region V files are inWashington. These copies are for attachment to the Washington Office copies.

Enclosures: 5

A. B. Needham

SEP 7 8 51 AM '51
DEFENSE ADMINISTRA WASHINGTON, D.C.

DOMESTIC SERVICE			
Check the class of service desired; otherwise this message will be sent as a full rate telegram			
FULL RATE TELEGRAM	X	SERIAL	
DAY LETTER		NIGHT LETTER	

WESTERN UNION

W. P. MARSHALL, PRESIDENT

1206

INTERNATIONAL SERVICE			
Check the class of service desired; otherwise this message will be sent at the full rate			
FULL RATE		DEFERRED	
CODE		NIGHT LETTER	

NO. WDS.-CL. OF SVC.	PD. OR COLL.	CASH NO.	CHARGE TO THE ACCOUNT OF	TIME FILED
			Blair & Blair 421 Tower Bldg.	

Send the following message, subject to the terms on back hereof, which are hereby agreed to

August 29, 1951
Washington, D. C.

Miss Peggy Keenan
Spearfish, South Dakota

After conversation tith Mittendorf it is my understanding that contract funds cover only cost of running your samples and goverment should pay for its owm. Wire C.O.Mittendorf, Production and Expansion Divsion, Defense Minerals Administration the field team estimate of cost of privatelya assaying their samples.

DEFENSE MINERALS ADMINISTRATION WASHINGTON, D.C.
AUG 30 8 56 AM '51

DEPARTMENT OF THE INTERIOR
RECEIVED
AUG 31 1951
Defense Minerals Administration,
Production Expansion Division.

W. C. Broadgate

ALL MESSAGES TAKEN BY THIS COMPANY ARE SUBJECT TO THE FOLLOWING TERMS:

To guard against mistakes or delays, the sender of a message should order it repeated, that is, telegraphed back to the originating office for comparison. For this, one-half the unrepeated message rate is charged in addition. Unless otherwise indicated on its face, this is an unrepeated message and paid for as such, in consideration whereof it is agreed between the sender of the message and this Company as follows:

1. The Company shall not be liable for mistakes or delays in the transmission or delivery, or for non-delivery, of any message received for transmission at the unrepeated-message rate beyond the sum of five hundred dollars; nor for mistakes or delays in the transmission or delivery, or for non-delivery, of any message received for transmission at the repeated-message rate beyond the sum of five thousand dollars, unless specially valued; nor in any case for delays arising from unavoidable interruption in the working of its lines.

2. In any event the Company shall not be liable for damages for mistakes or delays in the transmission or delivery, or for the non-delivery, of any message, whether caused by the negligence of its servants or otherwise, beyond the actual loss, not exceeding in any event the sum of five thousand dollars, at which amount the sender of each message represents that the message is valued, unless a greater value is stated in writing by the sender thereof at the time the message is tendered for transmission, and unless the repeated-message rate is paid or agreed to be paid, and an additional charge equal to one-tenth of one percent of the amount by which such valuation shall exceed five thousand dollars.

3. The Company is hereby made the agent of the sender, without liability, to forward this message over the lines of any other company when necessary to reach its destination.

4. Except as otherwise indicated in connection with the listing of individual places in the filed tariffs of the Company, the amount paid for the transmission of a domestic telegram or an incoming cable or radio message covers its delivery within the following limits: In cities or towns of 5,000 or more inhabitants where the Company has an office which, as shown by the filed tariffs of the Company, is not operated through the agency of a railroad company, within two miles of any open main or branch office of the Company; in cities or towns of 5,000 or more inhabitants where, as shown by the filed tariffs of the Company, the telegraph service is performed through the agency of a railroad company, within one mile of the telegraph office; in cities or towns of less than 5,000 inhabitants in which an office of the Company is located, within one-half mile of the telegraph office. Beyond the limits above specified the Company does not undertake to make delivery, but will endeavor to arrange for delivery as the agent of the sender, with the understanding that the sender authorizes the collection of any additional charge from the addressee and agrees to pay such additional charge if it is not collected from the addressee. There will be no additional charge for deliveries made by telephone within the corporate limits of any city or town in which an office of the Company is located.

5. No responsibility attaches to this Company concerning messages until the same are accepted at one of its transmitting offices; and if a message is sent to such office by one of the Company's messengers, he acts for that purpose as the agent of the sender.

6. The Company will not be liable for damages or statutory penalties when the claim is not presented in writing to the Company, (a) within sixty days after the message is filed with the Company for transmission in the case of a message between points within the United States (except in the case of an intrastate message in Texas) or between a point in the United States on the one hand and a point in Alaska, Canada, Labrador, Mexico, Newfoundland and St. Pierre & Miquelon Islands on the other hand, or between a point in the United States and a ship at sea or in the air, (b) within 95 days after the cause of action, if any, shall have accrued in the case of an intrastate message in Texas, and (c) within 180 days after the message is filed with the Company for transmission in the case of a message between a point in the United States and a foreign or overseas point other than the points specified above in this paragraph; provided, however, that this condition shall not apply to claims for damages or overcharges within the purview of Section 415 of the Communications Act of 1934.

7. It is agreed that in any action by the Company to recover the tolls for any message or messages the prompt and correct transmission and delivery thereof shall be presumed, subject to rebuttal by competent evidence.

8. Special terms governing the transmission of messages according to their classes, as enumerated below, shall apply to messages in each of such respective classes in addition to all the foregoing terms.

9. No employee of the Company is authorized to vary the foregoing.

1-49

CLASSES OF SERVICE

DOMESTIC SERVICES

FULL RATE TELEGRAM

A full rate expedited service.

DAY LETTER (DL)

A deferred service at lower than the full rate.

SERIAL (SER)

Messages sent in sections during the same day.

NIGHT LETTER (NL)

Accepted up to 2 A. M. for delivery not earlier than the following morning at rates substantially lower than the full rate telegram or day letter rates.

INTERNATIONAL SERVICES

FULL RATE (FR)

The standard fast service at full rates. May be written in any language that can be expressed in Roman letters, or in cipher.

CODE (CDE)

A fast message service consisting of code words not exceeding 5 letters each. Minimum charge for 5 words applies.

DEFERRED (LC)

Plain language messages, subordinated to full rate and code messages. Minimum charge for 5 words applies.

NIGHT LETTER (NLT)

Overnight plain language messages. Minimum charge for 25 words applies.

IN REPLY REFER TO:

G-MD-JJN

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

August 27, 1951

a.e.c.

Memorandum

To: Weston Bourret, Defense Minerals Administration

From: J. J. Norton, U. S. Geological Survey

Subject: Keenan placer, Black Hills, South Dakota.

J. A. Redden's monthly report for August contains the following paragraph:

> Redden spent 0.1 man-months in discussion with D. H. Mullins, Walker, and Binyon of the Bureau of Mines, and in visiting the Keenan Properties DMA Exploration at Tinton, S. Dak. The gravels in most of the Keenan Properties are too thin and so located as to preclude a successful operation. The gravels at the lower extent of Bear Creek on the extreme northeast side of Keenan Properties -- the Seventy Flats Claims -- are fairly thick and in a favorable location for working. This area has potential value if the grade of the gravels agrees with the applicant's claims. A trench has been cut across the entire channel, not far above Seventy Flats and sampling is in progress under the supervision of the Bureau of Mines.

J. J. Norton

JJNorton:jeh
G-8/27/51
copy to: Director's Reading 4212
~~Blockhouse 240x~~
Branch Reading 4212
DMA files
JJNorton, G-228, GS. Bldg.

a.e.c.

DENNIS CHAVEZ, N. MEX., CHAIRMAN
JOHN L. MCCLELLAN, ARK. HARRY P. CAIN, WASH.
SPESSARD L. HOLLAND, FLA. EDWARD MARTIN, PA.
JOHN C. STENNIS, MISS. GEORGE W. MALONE, NEV.
ROBERT S. KERR, OKLA. HENRY C. DWORSHAK, IDAHO
THOMAS C. HENNINGS, JR., MO. FRANK CARLSON, KANS.
EARLE C. CLEMENTS, KY. FRANCIS CASE, S. DAK.

FRANK BURNETT, CHIEF CLERK

JUL 30 1951

United States Senate

COMMITTEE ON PUBLIC WORKS

July 27, 1951

Hon. R. D. Searles
Under Secretary of the Interior
Department of the Interior
Washington 25, D. C.

My dear Mr. Searles:

Your letter of July 25 referring to the contract entered into by the Defense Minerals Administration and Miss Peggy Keenan for Keenan Properties has been received.

I am taking the liberty of acknowledging and thanking you for it in Senator Case's temporary absence from his office.

I know that Senator Case will be pleased to learn that this exploration loan has been approved and that the contract has been entered into.

We hope and expect that this contract will facilitate development of these properties, to the benefit of the operators and the United States Government. We hope also that it will stimulate and encourage other mining activity in the Black Hills of South Dakota, to the end that the Government may be supplied with needed strategic minerals.

Your kindness in writing is much appreciated.

Sincerely,

Chas. Gardner Jr.
Executive Secretary

RECEIVED
AUG 2 4 1951

g

AUG 24 3 54 PM '51
BUREAU OF MINES
MAIL ROOM
WASHINGTON, D. C.

FILE COPY
SURNAME:

Ellis
Mittendorf
Signed 7/20

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

JUL 25 1951

My dear Mr. Berry:

I am pleased to report to you that the Defense Minerals Administration of this Department has recently entered into a contract with Miss Peggy Keenan d/b/a Keenan Properties, operating in your state for the exploration of possible sources of tin, columbium, tantalum and tungsten.

The contract provides that the Government will participate in the expense of this work up to 90% of the cost thereof.

This type of assistance is provided for under Section 303 of the Defense Production Act.

The Defense Minerals Administration will be glad to furnish you any further details you may desire regarding the matter.

Sincerely yours,

(sgd) R. D. Searles

Secretary of the Interior

Honorable E. Y. Berry
House of Representatives
Washington 25, D. C.

EWEllis/bih
Written 7/17/51
cc to: Messrs. Secy's. Reading File
Admr's Reading File
Mittendorf-Olund
Reports & Records
E. W. Ellis
F I L E S

Same letter to: Senator Francis Case
Senator Karl E. Mundt

RETURN TO THE BUREAU OF MINES

7.23

BUREAU OF MINES
WASHINGTON, D.C.
JUL 26 2 23 PM '51

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

FILE COPY
SURNAME:

My Dear Senator Mundt:

I am pleased to report to you that the Defense Minerals Administration of this Department has recently entered into a contract with Miss Peggy Keenan d/b/a Keenan Properties, operating in your state for the exploration of possible sources of tin, columbium, tantalum and tungsten.

The contract provides that the Government will participate in the expense of this work up to 90% of the cost thereof.

This type of assistance is provided for under Section 303 of the Defense Production Act.

The Defense Minerals Administration will be glad to furnish you any further details you may desire regarding the matter.

Sincerely yours,

(SGD) R. D. Searles

Secretary of the Interior

Honorable Karl E. Mundt
United States Senate
Washington 25, D. C.

EWEllis/bih
Written 7/17/51
cc to: Messrs. Secy's Reading File
Adm'r's. Reading File
Mittendorf-Olund
Reports & Records
EWEllis
FILES

BUREAU OF MINES
WASHINGTON, D. C.
JUL 26 2 25 PM '51

FILE COPY
SURNAME:

Mittendorf

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

July 18, 1951

Mr. A. B. Needham
Executive Officer, Region V
Defense Minerals Administration
2908 Colfax Avenue South
Minneapolis 8, Minnesota

Re: DMA-654X
Peggy Keenan
d/b/a Keenan Properties
Spearfish, South Dakota

Dear Mr. Needham:

Enclosed for the use of your office is one copy of the contract covering the subject exploration project.

A copy for the Regional Finance Officer will be forwarded directly to him by the Washington Finance Division, together with accounting instructions.

Sincerely yours,

C. O. Mittendorf

C. O. Mittendorf, Director
Production Expansion Division

Enclosure-1

COMittendorf/fw

cc to: Reports and Records
Admr. Reading File
Field Team Reg.V (2)
Mr. Lyon
Mr. Bourret
Mrs. Terry, Finance Div.
Mr. Ellis
Mr. Mittendorf, Mr. Olund
FILES

FILE COPY
SURNAME:

Ellis
Olund
Mittendorf

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

FILE NOTE: Operator's copy handed to her in person by Mr. E.W.Ellis.

July 17, 1951

Keenan Properties
Q. E. C.

Miss Peggy Keenan
Spearfish
South Dakota

Re: Docket No. DMA-654X
Peggy Keenan
d/b/a Keenan Properties

Dear Miss Keenan:

Enclosed find executed Exploration Project Contract No. Idm-E58, dated July 16, 1951, with attached Exhibits and maps; also a set of monthly Progress Reports (Form MF-104). A Progress Report is to be submitted in quadruplicate to the DMA field representative in your area where additional copies may be obtained.

Any questions appertaining to this project should be referred to Mr. A. B. Needham, 2908 Colfax Avenue, South, Minneapolis 8, Minnesota. Please notify Mr. Needham when you begin work on this project.

A press release dated May 14, 1951 on "Questions and Answers on the Minerals Exploration Program" is also enclosed for your information.

Enclosures

Sincerely yours,

C. O. Mittendorf

C. O. Mittendorf, Director
Production Expansion Division

EWEllis/bih
cc to: Messrs. Mittendorf-Olund
Reports & Records
Lyon
Terry
Bourret
A.B.Needham, Region V
Field Finance Sec. Bu of Mines
Contract Service Sec. GAO
EWEllis
F I L E S

FILE COPY
SURNAME:

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

July 17, 1951

A.E.C.

Mr. Frank McAtee, Jr.,
Contract Service Section
General Accounting Office
4th Floor - New AGO Building
Washington 25, D. C.

Re: Docket No. DMA-654X
Exploration Project Contract
Idm-E58
Peggy Keenan
d/b/a Keenan Properties
Spearfish, South Dakota

Dear Mr. McAtee:

Enclosed for recording in your office is the original signed copy of an Exploration Project Contract executed between the operator, named in the above reference, and the Government of the United States.

Sincerely yours,

C. O. Mittendorf

C. O. Mittendorf, Director
Production Expansion Division

Enclosure - 1

EWEllis/bih

cc to: Messrs. Admr's. Reading File
Reports & Records
Mittendorf-Olund
Lyon
Bourret
A.B.Needham, Region V (2)
EWEllis
F I L E S

6/5/51

Defense Minerals Administration

Review of Application for Exploration Assistance

Docket No. DMM-6[illegible]-X

Commodity Tin, Columbite-tantalite, Tungsten

Total Amount ?

Govt. Participation

1. Name and Address of Applicant Keenan Properties
c/o W.C. Broadgale 921 Tower Blds. Washington D.C.

2. Location of Property Spearfish, South Dakota, Lawrence Co.
Beer Creek & Potato Creek

3. Mineral or metal Tin, Columbite, Tungsten Is it listed in Section 9 of MO-5? Yes

If not, application will be rejected.

4. Geologic probability of discovery—based on data in application (question #16, 17, 18, 20 and 22)*

Mines or Survey reports, etc., do you rate chances:

a) Good Don't know. I suspect that the chances are poor as pointed out by Meckham.

b) Poor The only target can see is the Columbite this is the probl. If the engineers

c) None representatives find that the "readjusted" sampling program

d) Don't know—needs field examination Will settle the issue if should probably be undertaken

e) Is there an alternative and favorable project? (If so, attach an explanation) [illegible]

5. Is the applicant's right to the property clearly stated? (question 5, 6, 7)*

6. If applicant is a lessee, is a copy of the lease attached?

Does the lease have sufficient time to run to cover a future productive period?

*question numbers are those of MF-103

7. Are subordination agreements necessary?_____

   a) MF-201?_____

   b) MF-202_____

8. From the data presented, does the proposed project appear feasible from the point of view of:

   a) Available manpower_____

   b) Equipment and supplies_____
      (Question 14 plus general knowledge of availability)*

   c) Accessibility (question 12)*_____

   d) Water (question 13)*_____

   e) Power (question 13)*_____

   Is a field check needed on any of these points?_____

9. Does the experience of the applicant appear to be adequate to assure that he can properly conduct the proposed project? (question 4)*_____

   Is a field check needed on this point?_____

10. Exhibit A. (questions 21 and 22)*

   a) Is the project adequately described? Yes (revised program)

      If not, are there sufficient data given so that you can describe the project?_____ If so, attach a draft.

   b) Is there an adequate map or sketch of the proposed work? Yes

   c) Is the proposed work "exploration" under the definition of Section 8, MO-5? Yes

      If not, what part of it is?_____

Is this part a worthwhile exploration project?_____

d) Are the cost estimates detailed?_____

Can they be summarized, as on page 2 of Procedural Instruction 5-A, from the available data?_____ If so, attach a draft.

e) Are the cost estimates reasonable?_____

f) Should more information be requested from applicant?_____

g) Is a field examination necessary to complete Exhibit A?_____

11. Exhibit B (question 23-d)*

a) Is it applicable?_____

b) If so, are sufficient data furnished?_____ If so, attach a draft.

c) Is a field check needed?_____

12. Exhibit C (question 23-e, f and g)*

a) Is it applicable?_____

b) Sufficient data?_____ If so, attach a draft.

c) Are rents and charges reasonable?_____

d) Is a field check needed?_____ _____

13. Exhibit D (question 23-a, b)*

a) Are there sufficient data?_____

b) Is the schedule adequate for the work proposed?_____

c) Is the schedule excessive for the work proposed?_____

d) Are the proposed wages and salaries reasonable?_____

e) Is a field check needed?_____

14. Exhibit E (question 23-c)*

a) Is it applicable? _____

b) Sufficient data? _____

c) Reasonable? _____

d) Field check needed? _____

15. In your judgment, can the proposed work be done in the proposed time? _____

(All exploration must be completed within two years)

16. If field examination is not needed, attach your recommendation.

17. If field examination is needed, do you have any special instructions for the field team not indicated by your answers to the foregoing question? The 3 sample sites on Bear Creek may be overly rich due to their proximity to the Great Valley claims. Possibly sample locations should be moved downstream where the largest reserves of gravel are located. Check the photography to see whether the proposed sites are located "positions for concentration"

Reviewed by: [illegible] 6/20/57

Date _____

97692

6/5/51

Defense Minerals Administration

Review of Application for Exploration Assistance

Docket No. DMA-654-X

Commodity Tin, Columbite-Tantalite, Tungsten

Total Amount ?

Govt. Participation

1. Name and Address of Applicant Keenan Properties
C/o W.C. Broadgate 421 Tower Blds. Washington D.C.

2. Location of Property Spearfish, South Dakota, Lawerence Co.
Bear Greek + Potato Creek

3. Mineral or metal Tin, Cb-Ta, Tungsten Is it listed in Section 9 of MO-5? Yes

If not, application will be rejected.

4. Geologic probability of discovery—based on data in application (question #16, 17, 18, 20 and 22)*

Mines or Survey reports, etc., do you rate chances:

a) Good
b) Poor
c) None
d) Don't know—needs field examination
e) Is there an alternative and favorable project? (If so, attach an explanation)

Don't Know. I suspect that the chances are Poor as pointed out by Needham. The only thing I can see is to recommend this to the field. If the Survey and Bureau representatives find that the "readjusted" sampling program will settle the issue it should probably be undertaken JMC 6/6/51

5. Is the applicant's right to the property clearly stated? (question 5, 6, 7)*

6. If applicant is a lessee, is a copy of the lease attached?

Does the lease have sufficient time to run to cover a future productive period?

*question numbers are those of MF-103

7. Are subordination agreements necessary?_____

   a) MF-201?_____

   b) MF-202_____

8. From the data presented, does the proposed project appear feasible from the point of view of:

   a) Available manpower_____

   b) Equipment and supplies_____
      (Question 14 plus general knowledge of availability)*

   c) Accessibility (question 12)*_____

   d) Water (question 13)*_____

   e) Power (question 13)*_____

   Is a field check needed on any of these points?_____

9. Does the experience of the applicant appear to be adequate to assure that he can properly conduct the proposed project? (question 4)*_____

   Is a field check needed on this point?_____

10. Exhibit A. (questions 21 and 22)*

   a) Is the project adequately described? Yes (revised program)

      If not, are there sufficient data given so that you can describe the project?_____ If so, attach a draft.

   b) Is there an adequate map or sketch of the proposed work? Yes

   c) Is the proposed work "exploration" under the definition of Section 8, MO-5? Yes

      If not, what part of it is?_____

Is this part a worthwhile exploration project?_____

d) Are the cost estimates detailed?_____

Can they be summarized, as on page 2 of Procedural Instruction 5-A, from the available data?_____ If so, attach a draft.

e) Are the cost estimates reasonable?_____

f) Should more information be requested from applicant?_____

g) Is a field examination necessary to complete Exhibit A?_____

11. Exhibit B (question 23-d)*

a) Is it applicable?_____

b) If so, are sufficient data furnished?_____ If so, attach a draft.

c) Is a field check needed?_____

12. Exhibit C (question 23-e, f and g)*

a) Is it applicable?_____

b) Sufficient data?_____ If so, attach a draft.

c) Are rents and charges reasonable?_____

d) Is a field check needed?_____ _____

13. Exhibit D (question 23-a, b)*

a) Are there sufficient data?_____

b) Is the schedule adequate for the work proposed?_____

c) Is the schedule excessive for the work proposed?_____

d) Are the proposed wages and salaries reasonable?_____

e) Is a field check needed?_____

14. Exhibit E (question 23-c)*

a) Is it applicable? (

b) Sufficient data?

c) Reasonable?

d) Field check needed?

15. In your judgment, can the proposed work be done in the proposed time?

(All exploration must be completed within two years)

16. If field examination is not needed, attach your recommendation.

17. If field examination is needed, do you have any special instructions for the field team not indicated by your answers to the foregoing question? The 3 sample sites on Bear Creek may be overly rich due to their proximity to the Giant Volney Claims. Possibly one of the locations should be moved downstream where their largest reserves of gravel are located. Check the physiography to see whether the proposed sites are located at "average" "positions for concentration".

Reviewed by: JMRedden USGS 6/20/57

Date

97692

FILE COPY
SURNAME:

Guthrie

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

July 13, 1951

Memorandum

To: Mr. C. O. Mittendorf

From: General Counsel

Subject: DMA-654X--Peggy Keenan d/b/a Keenan Properties exploration contract

We have reviewed the contract submitted on the captioned case and return herewith a suggested redraft which we believe will meet the objections discussed with you. The redraft is approved as to form and legality subject to the filling in of the dates of the lease agreements, the obtaining of a subordination agreement from L. G. and W. O. Fillmore, and the proper execution of the contract by the prospective operator. The date of the contract should be inserted at the time it is executed.

Your file is returned herewith.

J. L. Hofflund

J. L. Hofflund
General Counsel

Attachment
RRGuthrie/em

Copy to: L. F. Strobel
R. R. Guthrie
J. L. LHoflund
Files

DMA 654

856

FILE COPY
SURNAME:

Bourret

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

July 10, 1951

Memorandum

Confidential

To: Director, Production Expansion Division

Through: Director, Supply Division

From: Minor and Rare Metals Branch

Subject: Keenan properties, Spear Fish, South Dakota
DMA docket 654x

With reference to our memo of June 25, 1951 recommending the Keenan Exploration contract, I wish to include the following additional information for the record:

(1) Original application was submitted in the amount of $100,000.
(2) In discussing the project with the applicants representative, Mr. Broadgate, he was advised DMA would consider a certain amount of preliminary sampling. The $19,000 project as approved was worked out and submitted by Mr. Walter Johnson, Consulting Engineer, following this discussion.
(3) Applicant advised in conversation, that the DMA would consider the possibility of additional testing, upon completion of stage 1, which calls for the $19,000 expenditure.
(4) Applicant requests that contract be written in the amount of $100,000, of which the $19,000 figure be specified to cover phase 1, "preliminary testing".

In view of the above, and providing there is no legal objection, I recommend that the contract be so drafted as to provide for the possibility of later additional testing, (up to a total amount of $81,000 following phase 1) in the event the presence of commercial concentrations of tin in amounts sufficient to indicate a profitable operation is demonstrated to the satisfaction of DMA and its field engineers.

Approved:

Weston Bourret, Chairman
Tin Committee

Production Expansion Division

WBourret/mh
Adm. Read. File
Reports and Records
Iron

Mittendorf
Field V

Bourret
Norton
Renick
Files

DOMESTIC SERVICE			
Check the class of service desired; otherwise this message will be sent as a full rate telegram			
FULL RATE TELEGRAM		SERIAL	
DAY LETTER		NIGHT LETTER	

WESTERN UNION

W. P. MARSHALL, PRESIDENT

1206

INTERNATIONAL SERVICE			
Check the class of service desired; otherwise this message will be sent at the full rate			
FULL RATE		DEFERRED	
CODE		NIGHT LETTER	

NO. WDS.-CL. OF SVC.	PD. OR COLL.	CASH NO.	CHARGE TO THE ACCOUNT OF	TIME FILED

Send the following message, subject to the terms on back hereof, which are hereby agreed to:

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 12 1951
LANDON F. STROBEL
Executive Secretary

COPY

July 9, 1951
Deadwood, S. Dakota

William C. Broadgate
421 Tower Bldg.
Washington, D. C.

Johnson advises urgent need start work KP on or before July 20 because prior commitment his superintendent August 20. If delayed will call Bourette regarding his investigation property. Wire contract status. Lined up equipment.

7-26-51

Contract completed July 19-51.

Peggy Keenan

Contract copy delivered to him in person.

ALL MESSAGES TAKEN BY THIS COMPANY ARE SUBJECT TO THE FOLLOWING TERMS:

To guard against mistakes or delays, the sender of a message should order it repeated, that is, telegraphed back to the originating office for comparison. For this, one-half the unrepeated message rate is charged in addition. Unless otherwise indicated on its face, this is an unrepeated message and paid for as such, in consideration whereof it is agreed between the sender of the message and this Company as follows:

1. The Company shall not be liable for mistakes or delays in the transmission or delivery, or for non-delivery, of any message received for transmission at the unrepeated-message rate beyond the sum of five hundred dollars; nor for mistakes or delays in the transmission or delivery, or for non-delivery, of any message received for transmission at the repeated-message rate beyond the sum of five thousand dollars, unless specially valued; nor in any case for delays arising from unavoidable interruption in the working of its lines.

2. In any event the Company shall not be liable for damages for mistakes or delays in the transmission or delivery, or for the non-delivery, of any message, whether caused by the negligence of its servants or otherwise, beyond the actual loss, not exceeding in any event the sum of five thousand dollars, at which amount the sender of each message represents that the message is valued, unless a greater value is stated in writing by the sender thereof at the time the message is tendered for transmission, and unless the repeated-message rate is paid or agreed to be paid, and an additional charge equal to one-tenth of one percent of the amount by which such valuation shall exceed five thousand dollars.

3. The Company is hereby made the agent of the sender, without liability, to forward this message over the lines of any other company when necessary to reach its destination.

4. Except as otherwise indicated in connection with the listing of individual places in the filed tariffs of the Company, the amount paid for the transmission of a domestic telegram or an incoming cable or radio message covers its delivery within the following limits: In cities or towns of 5,000 or more inhabitants where the Company has an office which, as shown by the filed tariffs of the Company, is not operated through the agency of a railroad company, within two miles of any open main or branch office of the Company; in cities or towns of 5,000 or more inhabitants where, as shown by the filed tariffs of the Company, the telegraph service is performed through the agency of a railroad company, within one mile of the telegraph office; in cities or towns of less than 5,000 inhabitants in which an office of the Company is located, within one-half mile of the telegraph office. Beyond the limits above specified the Company does not undertake to make delivery, but will endeavor to arrange for delivery as the agent of the sender, with the understanding that the sender authorizes the collection of any additional charge from the addressee and agrees to pay such additional charge if it is not collected from the addressee. There will be no additional charge for deliveries made by telephone within the corporate limits of any city or town in which an office of the Company is located.

5. No responsibility attaches to this Company concerning messages until the same are accepted at one of its transmitting offices; and if a message is sent to such office by one of the Company's messengers, he acts for that purpose as the agent of the sender.

6. The Company will not be liable for damages or statutory penalties when the claim is not presented in writing to the Company, (a) within sixty days after the message is filed with the Company for transmission in the case of a message between points within the United States (except in the case of an intrastate message in Texas) or between a point in the United States on the one hand and a point in Alaska, Canada, Labrador, Mexico, Newfoundland and St. Pierre & Miquelon Islands on the other hand, or between a point in the United States and a ship at sea or in the air, (b) within 95 days after the cause of action, if any, shall have accrued in the case of an intrastate message in Texas, and (c) within 180 days after the message is filed with the Company for transmission in the case of a message between a point in the United States and a foreign or overseas point other than the points specified above in this paragraph; provided, however, that this condition shall not apply to claims for damages or overcharges within the purview of Section 415 of the Communications Act of 1934.

7. It is agreed that in any action by the Company to recover the tolls for any message or messages the prompt and correct transmission and delivery thereof shall be presumed, subject to rebuttal by competent evidence.

8. Special terms governing the transmission of messages according to their classes, as enumerated below, shall apply to messages in each of such respective classes in addition to all the foregoing terms.

9. No employee of the Company is authorized to vary the foregoing.

1-49

CLASSES OF SERVICE

DOMESTIC SERVICES

FULL RATE TELEGRAM

A full rate expedited service.

DAY LETTER (DL)

A deferred service at lower than the full rate.

SERIAL (SER)

Messages sent in sections during the same day.

NIGHT LETTER (NL)

Accepted up to 2 A. M. for delivery not earlier than the following morning at rates substantially lower than the full rate telegram or day letter rates.

INTERNATIONAL SERVICES

FULL RATE (FR)

The standard fast service at full rates. May be written in any language that can be expressed in Roman letters, or in cipher.

CODE (CDE)

A fast message service consisting of code words not exceeding 5 letters each. Minimum charge for 5 words applies.

DEFERRED (LC)

Plain language messages, subordinated to full rate and code messages. Minimum charge for 5 words applies.

NIGHT LETTER (NLT)

Overnight plain language messages. Minimum charge for 25 words applies.

THE JEFFERSON HOTEL
1200 SIXTEENTH STREET, N. W.
WASHINGTON 6, D. C.
DISTRICT 4704

June 26. 51

Dear Mr. Broadgate:

Herewith documents required by Mr. Gordon of DMA.

Disposition regarding the Daisy & Belmont claims on Potato Creek and a corrected Creek map correcting an error of omitting a Belmont claim (on the photostats previously submitted.)

Also copies of a receipt on the W O Fillmore lease and a receipt on the Connors Ground lease for advance royalties which are the only lease documents showing a 15 year term of lease so long as advance royalties are paid. All leases are paid up to date.

Sincerely Peggy Kenna

FILE COPY
SURNAME:

Gordon Bennett
Peter Bennett

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

June 25, 1951

Memorandum

To: Director, Production Expansion Division

From: Director, Supply Division

Subject: Keenan Properties, Spearfish, S. Dakota
Tin - DMA docket - 654x

Underdate of April 16, 1951, Keenan Properties submitted the subject exploration project, DMA-654x first requesting a production loan, subsequently revised and resubmitted as an exploration project. The revised project totals $19,000, for a government participation of $17,100, (90%). Applicant states he is prepared to put up $1,900 in cash.

The following factors have been weighed and considered in reviewing this application:

1. Refer MO-5, Sec. 7, (Criteria)
   (a) Domestic sources of tin and columbite-tantalite are of course desired.
   (b) Previous investigational reports on the property are somewhat inconculusive in demonstrating the grade of tin bearing gravels. Fansteel Corporation recovered 6,578 lbs. of tin concentrate assaying 53%Sn. from 11,072 lbs. of placer concentrates on Bear Creek. ~~From the same lot they recovered a tantalite concentrates on Bear Creek.~~ From the same lot they recovered a tantalite concentrate of 1,732 lbs. assaying 43.03% Ta_2O_5 and 27.06% Cb_2O_5.
   (c,d.e,f,) Sufficient manpower, equipment and supplies are easily obtainable. Good roads lead to the property and ample water is available. Only required power is the D-8 Cat to be rented.
   (g) W. W. Johnson, well known consulting placer engineer of San Francisco is being retained to oversee and report on the proposed work.

2. The ground to be included in the contract consists of the following claims:

Potato Creek - Beaver Creek Area

Placer Survey M.S. 392	- leased	from W. O. Fillmore*	
Belmont	"	"	*
Belmont #1,#2,#3,#4	"	"	*

DMA 654

Daisy	leased	from	W. O. Fillmore*
Daisy #2	"	"	" *

*Applicant states will send copies of lease.

Bear Creek Area

Golden Star #2	leased	Dakota Tin & Gold Co.
Oma & Oma Fraction	"	"
May Flower #1,#2,#3,#4	"	& W. O. Fillmore
Union	"	L.J. & W.O. Fillmore(Connor's ground)
Union #3,#5,#7	"	" " "
Elizabeth #9,#10,#11,#12	"	" " According to Applicants statement
Gold Band	Owned outright, Owner's written statement to this effect is needed	
Gold Band #1	"	"
Three Fines #5	"	"

Owner is obtaining landlords and mortgagors Subordination Agreements on the above, as required, and states will submit same promptly.

3. The entire project can be completed in less than ninety days following approval. It is expected to start within a few days following approval, field work will take thirty days and consultant's report submitted to DMA as soon as possible thereafter.

4. The project consists of five trenches to bedrock, by bulldozer, to be sampled throughly and well. These trenches are to be located as noted in red on the accompanying maps of exhibit "A", with the further proviso that the field team may suggest changes in locations upon consulting with Mr. Johnson, the applicants engineer. The area involved is one of stream gravels known to carry some tin, the commercial presence of which may be demonstrated by the subject project. Costs are estimated by applicant's engineer as follows:

Rental of equipment, fuel and repairs for 30 days	$ 4,200.00
Wages, Salaries, travel, assaying, supervision and consulting	14,800.00
Total	$19,000.00

Referring to the above costs, a provision should be made that all expenditures are to be covered by satisfactory vouchers. Exhibit C, item 5, and exhibit D, items 3,4,5,6, & 7, seem too generous.

Therefore, it is recommended that the Production Expansion Division negotiate a formal contract (MF-200) with Keenan Properties, which will permit the applicant to undertake the following specific exploration:

(a) Make three bulldozer trenches to bedrock on Bear Creek
(b) Make two bulldozer trenches to bedrock on Potato Creek
(c) Adequately and carefully sample above trenches along conventional and approved lines of procedure.

(d) Submit report prepared by Walter Johnson to the FHA promptly upon completion of project.

Tom Lyon

Tom Lyon, Director
Supply Division

Recommendation approved.
Production Expansion Division

WBourret/ah
cc: Adm. Read. File
Strobel
Lyon
Field Team V
Redden, U.S.D.S.
Bourret
Files

FILE COPY
SURNAME:

Bourret
Lyon
Strobel 6/26

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

June 22, 1951

Major General, Francis H. Griswold, U.S.A.F.
Munitions Board
Washington 25, D. C.

Dear General Griswold:

Thank you very much for the interest you have shown by your letter of June 12, in the Keenan Tin Placers of South Dakota. The Defense Minerals Administration is at the present time, negotiating contract with Miss Peggy Keenan (DMA-654x) which will permit exploration and testing of this ground. At the present time I see no reason why the DMA should not have this project underway during the near future.

With kind regards, I am,

Sincerely yours,

JAMES BOYD
Administrator

WBourret/mh

cc: Adm. Read. File
Strobel
Lyon
Field Team V
Bourret
Files

FILE COPY
SURNAME

Bourret

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

June 20, 1951

Miss Peggy Keenan
% W. G. Broadgate
421 Tower Building
Washington 5, D. C.

Re: Keenan Placers
DMA docket 654x

My dear Miss Keenan:

We wish to acknowledge receipt of your letter of June 12, 1951 transmitting various exhibits for use in connection with drafting the Keenan contract with Defense Minerals Administration.

In line with your request we will certainly make every effort to process this application at the earliest possible date. By the time you have obtained the subordination agreements I believe a preliminary draft of the contract should be completed.

Yours very truly,

Tom Lyon

Tom Lyon, Director
Supply Division

WBourret/bf
cc: Adm. Reading File
Lyon
Strobel
Merrill

Field Team (2)
Bourret
Files

Bourret 654x

KEENAN PROPERTIES.

c/o W. C. Broadgate
421 Tower Building
Washington 5, D. C.
June 12, 1951
Ans. 6-20-51

Mr. Tom Lyon, Director
Supply Division
Defense Minerals Administration
Washington 25, D. C.

Re: DMA 654 X
Att: Mr. Bourret

Dear Mr. Lyon:

As per our various conversations with Mr. Bourret, Keenan Properties submits herewith 6 copies each of various exhibits upon which to base a contract along the lines outlined in our correspondence.

Exhibit "A" consists of two maps showing the claim lines and the location of the five test cuts recommended by Mr. Walter Johnson, consulting engineer for Keenan Properties, for the first phase of the project.

Due to the nature of the operation there is no Exhibit "B".

Exhibit "C" consists of a list of items to be rented, together with the costs of rental and operation.

Exhibit "D" consists of the schedule of labor and supervision required. Due to the unusual nature of the first phase certain items other than labor and supervision have been included.

As there are no repairs nor rehabililation, no Exhibit "E" is attached.

The general terms of the contract as expressed in form MF - 200 are understood by Keenan Properties.

The subordination agreements are not presently attached as, due to the location of the property in South Dakota, it will take some days to obtain them. We trust that the processing of the contract may proceed in the interim and that the subordination agreements may be attached thereto when received.

Attached to this letter is a copy of Mr. Johnson's proposal, as worked out with Messrs. Bourret and Broadgate, and with which I am in agreement.

We shall be pleased to confer with you or your staff at any time and to furnish such additional information as you may require.

Sincerely,

Peggy Keenan

Peggy Keenan
d/b as Keenan Properties

LANDON F. STROBEL

MUNITIONS BOARD
WASHINGTON 25, D. C.

MB PMR

JUN 12 1951

Dear Dr. Boyd:

We note by your letter of 3 May 1951 to Mr. W. C. Broadgate of the Keenan Properties that you offer to consider government participation up to 90% for mineral exploration of their South Dakota holdings.

We hope that the Keenan Properties will accept this offer. In this case we urge that minerals exploration of these properties be conducted expeditiously to determine if further action by the government is warranted to assist this company in equipping and operating their placers.

Sincerely yours,

Francis H. Griswold

FRANCIS H. GRISWOLD
MAJOR GENERAL, U.S.A.F.
MILITARY DIRECTOR FOR
REQUIREMENTS MANAGEMENT

Dr. James Boyd
Administrator
Defense Minerals Administration
Department of Interior

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 14 1951

LANDON F. STROBEL
Executive Secretary

KEENAN PROPERTIES.

c/o W. C. Broadgate
421 Tower Building
Washington 5, D. C.
June 12, 1951

Mr. Tom Lyon, Director
Supply Division
Defense Minerals Administration
Washington 25, D. C.

Re: DMA 654 X
Att: Mr. Bourret

Dear Mr. Lyon:

As per our various conversations with Mr. Bourret, Keenan Properties submits herewith 6 copies each of various exhibits upon which to base a contract along the lines outlined in our correspondence.

Exhibit "A" consists of two maps showing the claim lines and the location of the five test cuts recommended by Mr. Walter Johnson, consulting engineer for Keenan Properties, for the first phase of the project.

Due to the nature of the operation there is no Exhibit "B".

Exhibit "C" consists of a list of items to be rented, together with the costs of rental and operation.

Exhibit "D" consists of the schedule of labor and supervision required. Due to the unusual nature of the first phase certain items other than labor and supervision have been included.

As there are no repairs nor rehabililation, no Exhibit "E" is attached.

The general terms of the contract as expressed in form MF - 200 are understood by Keenan Properties.

The subordination agreements are not presently attached as, due to the location of the property in South Dakota, it will take some days to obtain them. We trust that the processing of the contract may proceed in the interim and that the subordination agreements may be attached thereto when received.

Attached to this letter is a copy of Mr. Johnson's proposal, as worked out with Messrs. Bourret and Broadgate, and with which I am in agreement.

We shall be pleased to confer with you or your staff at any time and to furnish such additional information as you may require.

Sincerely,

Peggy Keenan

Peggy Keenan
d/b as Keenan Properties

FILE COPY
SURNAME:

Bourret
Lyon

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

June 12, 1951

Mr. W. C. Broadgate
421 Tower Building
Washington 5, D. C.

Re: Keenan Properties
DMA docket - 654x

Dear Mr. Broadgate:

Thank you for your letter of May 28, 1951 with reference to the Fansteel Operation, near Beartown, South Dakota.

As I am sure you will appreciate the Fansteel Metalurgical Corporation is very much interested in tantalite, and are the principal producers of tantalum metal in this country. We place considerable reliance of the work of Fansteel in the area referred to; however, the results obtained by that organization were so discouraging as to preclude the possibility of obtaining but a very meager supply of concentrates.

Yours very truly,

Tom Lyon

Tom Lyon, Director
Supply Division

WBourret/mh
cc: Adm. Reading File
Strobel
Lyon
Field Team V
Bourret
Files

WALTER W. JOHNSON COMPANY
PLACER MINING
CONSULTATION EQUIPMENT-DESIGN CONSTRUCTION
351 CALIFORNIA STREET
SAN FRANCISCO 4, CALIFORNIA
TELEPHONE: SUTTER 1-4537 CABLE ADDRESS: RETLAW

Copy

June 11, 1951.

Mr. W. C. Broadgate
421 Tower Building
Washington 5, D. C.

Dear Mr. Broadgate:

Referring to your letter of May 29, 1951 to Mr. Tom Lyon, Director Supply Division, Defense Minerals Administration, U. S. Department of the Interior the following is my estimate of the cost of the work to be done under the first phase of project "A", as outlined in the second paragraph of your letter.

I have taken the liberty to change the amount of work to be done, from four test pits to five trenches. In my estimate, I have included three trenches to bedrock on Bear Creek and two trenches to bedrock on Potato Creek as indicated by the stations marked on the accompanying maps. The trenches will be excavated use of a D8 tractor and bulldozer and will crosscut the channels from rim to rim, or to each side of the pay streak. I have estimated the average length of these trenches to be on hundred fifty feet.

Attached hereto are the items as required in Exhibit "C" and Exhibit "D" of the Exploration Project Contract MF 200.

Sincerely,

Walter W. Johnson
Consulting Engineer

FILE COPY
SURNAME:

Bourret

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

June 7, 1951

Mr. W. C. Broadgate
421 Tower Building
Washington 5, D. C.

Re: Keenan Properties
Spearfish, South Dakota
DMA Docket No. 6[illegible]

Dear Mr. Broadgate:

This will acknowledge receipt of your letter of May 29, 1951, also your letter of May 31, 1951, addressed to Mr. Weston Bourret.

In principle the Defense Minerals Administration believes some preliminary testing is justified on the Keenan property as discussed in my office; however, we cannot in any way commit the DMA to a program or proposal until your detailed application has been reviewed. You should regard your conversation in this office as purely a preliminary negotiation.

I am enclosing herewith contract form (MF-200) which I suggest you look over carefully at this time. In order to complete a DMA contract it is necessary that the various exhibits (Exhibits A to K inclusive) be set up in detail as these are made a permanent part of the contract. These exhibits should be prepared in sets of six.

Mr. Bourret will be pleased to meet your engineer, Mr. Walter Johnson, at any time. However, it would be helpful if Mr. Johnson worked up a preliminary draft of his program before a meeting is arranged.

Very truly yours,

Tom Lyon

Tom Lyon, Director
Supply Division

Enclosure
WBourret/GMcC
cc: Files, Adm. Reading File, Mr. Strobel, Mr. Lyon, Mr. Bourret (2),
Field Team, Region V
Mr. Merrill, USBM
Mr. Jim Norton, USGS

JAMES F. STIRRETT
PHONE: STERLING 1100

ans. by F. Bourret
6/7/51 - G. McC.

W. C. BROADGATE
CONSULTING SERVICES
421 TOWER BUILDING
WASHINGTON 5, D. C.

May 31, 1951

Mr. Weston Bourret
Defense Minerals Administration
Room 1544, South Interior Bldg.
Washington 25, D. C.

Re: KEENAN PROPERTIES
Docket #654X

Dear Mr. Bourret:

Supplementing my letter of May 29 to Mr. Lyon and my conversation with you, this will inform you that Keenan Properties have been in touch with Mr. Walter Johnson, placer specialist, with regard to the exploration program. Copies of maps are being sent air mail to Mr. Johnson so that he may spot the first four pits.

It is my understanding that Mr. Johnson will be in Washington Tuesday and Wednesday of next week, at which time we can get together with you and work out the details of the whole program and the contract.

Sincerely,

Bill Broadgate
W. C. Broadgate

FORMERLY: TECHNICAL CONSULTANT U. S. SENATE SMALL BUSINESS COMMITTEE; STAFF DIRECTOR, S. S. B. C. SUBCOMMITTEE ON MINING AND MINERALS INDUSTRY; SPECIAL CONSULTANT AND LEGISLATIVE CONSULTANT TO OTHER SENATE AND HOUSE COMMITTEES.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

May 29, 1951

Memorandum

Re: Docket DMA-654X

To: Mr. Weston Bourret

From: Mr. Edwin T. McKnight

Subject: Application for exploration from Keenan Placers property, Spearfish, South Dakota.

Letter of May 14, 1951, from Peggy Keenan, which is accompanied by application on Form MF-103, is essentially a proposal to do the sampling with such mining equipment as a bulldozer, dragline, trucks, etc., that will be used in the "production" at a later stage. She is also proposing a plant for concentrating the valuable minerals, on the philosophy that such a plant can serve as a pilot operation and can, in part, be later used for commercial recovery. Her proposal comes to $100,000.

The Bureau's proposal for the full sampling job costs $70,000-$85,000. I haven't seen the details of their proposal but my guess is that it is more suited for the purpose at hand.

It seems to me that the problem is back in our lap as to whether an exploration project is worth while, and regardless of the fact that we may be interpreted as having encouraged this application by mentioning the program to the applicant, I should think that any proposal should be referred to the field team for an unbiased appraisal as to whether an exploration program is worth while. The check sampling that the Bureau has previously done suggests very strongly that there is no basis for a claim by the applicant that they have a potentially productive property.

I note in Needham's memo of January 23 to the Non-ferrous Metals Committee that he does not consider that further check samples (of the type proposed in the unmailed letter which you have in your desk) will do anything to clear up the misunderstanding between the applicant's and Bureau's sampling because of the scattered plan of ~~inch~~ SU test pitting, which would make the results inconclusive.

I recommend that this docket be returned to Needham

for review of the exploration proposal. If Needham recommends that the entire project be denied outright, then we would have nothing more to say on this subject. If, on the other hand, Needham wishes to recommend an exploration project, even one costing only a few thousand dollars, then I suggest that he ask M. M. Staatz, Geological Survey, Box 71, Custer, South Dakota, and a Bureau man to reexamine the property to determine the probable size of the reserves.

Edwin T. McKnight

Edwin T. McKnight
Geologist

ans by H. Bourret 6/7/51 - J McG

KEENAN PROPERTIES.

C/O W. C. Broadgate
421 Tower Building
Washington 5, D. C.
May 29, 1951.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 31 1951
LANDON F. STROBEL
Executive Secretary

Mr. Tom Lyon, Director
Supply Division
Defense Minerals Administration
U. S. Department of the Interior
Washington, D. C.

Dear Mr. Lyon:

This will confirm the agreement reached at our conference this morning between myself, representing Keenan Properties, Mr. Gardiner, representing Senator Case, Mr. Bourrette and yourself.

It is my understanding that DMA will approve a $100,000.00 exploration program for Keenan properties, the contract to be negotiated as to detail, but following this outline;

1. The work is to be done in progressive stages by Keenan Properties, preferably under the supervision of Mr. Walter Johnson.

2. The first work will consist of 4 test pits, sunk to bedrock at points to be chosen by Keenan Properties' engineer, subject to DMA approval.

3. Further test pits will be sunk by Keenan Properties, under the exploration contract aforesaid, at points which will best prove up satisfactory yardage until,

(a) The project is proven worthless or

(b) Sufficient yardage is proven on which to base a production loan,

at which time, in case (a), the exploration project shall be cancelled, or in case (b), a suitable production loan contract substituted therefore.

Keenan properties, with the cooperation of Mr. Bourrette, will within the next few days submit the outline of a contract and a map indicating the location of the initial pits.

Kindly inform me whether the above outline also covers your understanding of the situation.

Sincerely

Bill Broadgate
W. C. Broadgate

cc/ Senator Case

PHONE: STERLING 1100

W. C. BROADGATE
CONSULTING SERVICES
421 TOWER BUILDING
WASHINGTON 5, D. C.

May 28, 1951

Mr. Tom Lyon, Director
Supply Division
Defense Minerals Administration
U. S. Department of the Interior
Washington 25, D. C.

Re: Docket DMA-654x-KEENAN PROPERTIES.

Dear Mr. Lyon:

Your letter of May 24 is at hand. I am sure there is no language in either letter you mention which would lead to the conclusion that Keenan Properties are not willing to permit proper preliminary testing.

It seems clear that no two or three pits, even if sunk and sampled by experts, could hope to be as definitive as the Fansteel work. Information comes to me continually from various departments and agencies that columbite is so critical that a world-wide search is being held on the subject and cost is no object. If the matter drags out much longer another season will be lost.

If you have no reliance in the work of the Fansteel Metallurgical Corporation I can understand that preliminary testing would be necessary. By making the suggestion that the exploration program be started immediately based on Fansteel's result Keenan Properties believed it was acting in the best interests of the government and the Emergency Defence Program.

Sincerely,

Bill Broadgate

W. C. Broadgate

Broadgate
Called 10:20 AM
May 29 - 51

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 29 1951
LANDON F. STROBEL
Executive Secretary

FORMERLY: TECHNICAL CONSULTANT U. S. SENATE SMALL BUSINESS COMMITTEE; STAFF DIRECTOR, S. S. B. C. SUBCOMMITTEE ON MINING AND MINERALS INDUSTRY; SPECIAL CONSULTANT AND LEGISLATIVE CONSULTANT TO OTHER SENATE AND HOUSE COMMITTEES.

FILE COPY
SURNAME:

Bourret

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

May 24, 1951

Mr. W. C. Broadgate
Keenan Properties, Inc.
~~422 Tower~~ Building
Washington 5, D. C.

Re: Keenan Placers
DMA Docket 654X

Dear Mr. Broadgate:

This will acknowledge receipt of your letter of May 18: also, your letter of May 22, addressed to Dr. James Boyd, has been referred to my office for reply.

I judge from your two letters that Keenan Placers are not willing to permit the Defense Minerals Administration to make the preliminary test outlined to you in my letter of May 14.

We believe that the preliminary test by means of the two shafts referred to, would assist the field team in their review of your proposed exploration program. For this reason the DMA is not in a position to act on your exploration application until we have had an opportunity to make this preliminary test.

Yours very truly,

Tom Lyon

Tom Lyon, Director
Supply Division

WBourret/ad
cc: Adm. Reading File
Deputy Administrator
Executive Secretary
Mr. McKnight, USGS
Mr. Merrill, BM
Field Team (2)
Files

258

LANDON F. STROBEL

Dr. Bourret

KEENAN PROPERTIES

c/o W.C. Broadgate
421 Tower Building
Washington, 5, D. C.
May 22, 1951.

Dr. James Boyd
Department of the Interior
Defense Minerals Administration
Washington 25, D. C.

DMA 654 X

Dear Jim:

I have your letter of May 17 in which you state that a field test of the Keenan placers has been authorized.

Since my letter of May 8 you will note that Keenan Properties has filed an application for an exploration program. Also there has come to light the extensive work done by Fansteel at the property which resulted in the production of large quantities of columbite, tantalite and tin concentrates. The official Fansteel data is in the possession of Mr. Malcolm H. Carpenter of the Emergency Procurement Services, and is available to you.

The Fansteel work corroborates the Keenan findings and was far more extensive and definitive than would be test pitting. I should suggest, therefore, that it would be a saving both of time and money to proceed with the exploration program immediately if you feel you can accept the Fansteel results.

Sincerely

Bill Broadgate

W. C. Broadgate

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 23 1951
LANDON F. STROBEL
Executive Secretary

Bourut

KEENAN PROPERTIES

421 Tower Bldg.
Washington 5, D. C.
May 18, 1951.

Mr. Tom Lyon, Director,
Supply Division,
Defense Minerals Administration,
Department of the Interior,
Washington 25, D. C.

Docket DMA 654 X

Dear Mr. Lyon:

Referring now to the letter of May 14 requesting an exploration program from DMA, please note in the first paragraph on the third page you will find reference to sampling.

We feel that the granting of an exploration project would make such sampling unnecessary as it then would be done on a much larger scale than during a field examination. Should the exploration project request be granted, therefore, we would withdraw our request for independent sampling.

Sincerely

Bill Broadgate
W. C. Broadgate

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 21 1951
LANDON F. STROBEL
Executive Secretary

MAY 1 8 1951

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 1 8 1951
LANDON F. STROBEL
Executive Secretary

FILE COPY
Surname:

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

May 17, 1951

Mr. W. C. Broadgate
42 Tower Building
Washington 5, D. C.

Dear Bill:

This is in answer to your letter of May 9. I have delayed answering this letter until action on the Keenan Properties had actually been taken.

We have instructed the field to sink two pits on the Keenan Properties wherever the Keenan management desired. These pits will be sampled by expert placer men. The Keenan management may take samples at the same time. This is in the nature of preliminary examination to find out whether tin, columbium or gold actually exist in sufficient quantities to justify further work.

I trust that this will satisfy both you and the Keenans. I am hoping that these pits will show commercial value.

Sincerely yours,

JAMES BOYD

Administrator

TLyon:ah

cc: Administrator's Reading File
Deputy Administrator
Executive Secretary
Tom Lyon
Files

FILE COPY
SURNAME:

Bauch
on
Strobel 5/17

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

May 16, 1951

Hon. Francis Case
United States Senate
Washington 25, D. C.

My dear Senator Case:

Thank you very kindly for your letter of April 26, inquiring about the Keenan Property, near Spearfish, South Dakota, docket 654.

The Defense Minerals Administration field engineers and geologists have concluded, after careful consideration, that the gravel deposits of the Keenan ground have not been tested in a manner that assures the reserves of tin and other minerals claimed. For this reason the request for a loan in the amount of $570,599 in order to equip the properties for operation and provide operating capital, was denied.

In line with the provisions of the Defense Production Act of 1950 Keenan Placers have just recently applied for government assistance to undertake detailed testing and sampling. However, before proceeding further with this matter, the DMA has offered to do some preliminary check sampling by means of two test shafts in the area of deeper gravels, of Bear and Potato Creek areas. We believe that the result of this testing may throw sufficient light on the ground, to determine the merit of going into a more detailed sampling program.

Sincerely yours,

JAMES BOYD
Administrator

WBourret/mh
cc: Adm.Reading File
Mr. Lyon
Strobel
Field Team, V
Mr. McKnight
Mr. Merrill
Mr. Norton, USGS
Mr. Bourret
Files

Dna-654

856

May 16, 1951

Hon. Walter H. Moring
House of Representatives
Washington 25, D. C.

My dear Mr. Moring:

Thank you very kindly for your letter of April 27, inquiring about the Keenan Property, near Spearfish, South Dakota, docket 654.

The Defense Minerals Administration field engineers and geologists have concluded, after careful consideration, that the gravel deposits of the Keenan ground have not been tested in a manner that assures the reserves of tin and other min rals claimed. For this reason the request for a loan in the amount of $970,599 in order to equip the properties for operation and provide operating capital, was denied.

In line with the provisions of the Defense Production Act of 1950 Keenan Placers have just recently applied for government assistance to undertake detailed testing and sampling. However, before proceeding further with this matter, the DMA has offered to do some preliminary check sampling by means of two test shafts in the area of deeper gravels, of Bear and Castle Creek areas. We believe that the result of this testing may throw sufficient light on the ground to determine the merit of going into a more detailed sampling program.

Sincerely yours,

Administrator

WBourret/mh
cc: Adm. Reading File
Mr. Lyon
Mr. Strobel
Field Team, V
Mr. McKnight
Mr. Merrill
Mr. Norton, USGS
Mr. Bourret
Files

FILE COPY
SURNAME

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

May 16, 1951

Mr. W. C. Broadgate
421 Tower Building
Washington 5, D.C.

Subject: DMA 654X
Re: Exploration Loan
Keenan properties
(South Dakota)

My dear Mr. Broadgate:

Receipt is acknowledged of your application and attachments of May 2, 1951 for an exploration loan under the Defense Production Act. of 1950.

The application was assigned Docket Number 654X and referred to Mr. Weston G. Bourret, Acting Chief, Minor and Rare Metals Branch on May 15, 1951.

In any future correspondence relating to your application, kindly refer to DMA 654X.

Sincerely yours,

LANDON F. STROBEL

Landon F. Strobel
Executive Secretary

LFSTROBEL:mab
cc: Strobel
Files
Bourret
Lyon

~~Mr. Merritt~~
~~LANDON S. STRAUS~~
Dma - 654

United States Senate

WASHINGTON, D. C.

5/2/51

Mr. Landon Straus,
Executive Secretary
D. M. A.

Dear Landon,

You will find attached 4 certified location notices which cover some ground left out of the Kenan application, DMA 654.

Will you kindly add these to the docket?

Sincerely

Bill Broadgate

BUREAU OF MINES
MAIL ROOM
WASHINGTON, D. C.
MAY 4 12 55 PM '51

Bureau of Mines,
DEPARTMENT OF THE INTERIOR,
RECEIVED
MAY 8 1951
Metal Economics Division

LODE LOCATION CERTIFICATE

KNOW ALL MEN BY THESE PRESENTS:

That I, Peggy Keenan d/b/a Keenan Properties of the County of Lawrence and State of South Dakota, claim by right of discovery and location, fifteen hundred feet linear and horizontal measurement on the Gold Bond Lode along the vein, with all the dips, variations and angles, together with three hundred feet in width on each side of the middle of said vein at the surface, and all veins, lodes, ledges and surface ground within the lines of said Claim fifteen hundred feet on the Lode running southerly from the center of the discovery shaft and 300 feet running westerly from said center of discovery shaft being situated upon the said Lode within the lines of said claim in Rawlins Mining district, County of _____ State of South Dakota, being more particularly described as follows, to wit: Located in Bear Gulch bounded on the north by Gold Bond Nos 3 and 4, on the east by the Gold Bond No 1 and on the south by the Three Jims No 5, on the west by M.S. 1853

Said Gold Bond lode was located on the 26 day of April A. D. 1951

Attest:

Mrs. Elizabeth J. Hazard

Locators:

Peggy Keenan d/b/a
Keenan Properties
Spearfish S.D.

206 216

LOCATION CERTIFICATE

_____ Lode

_____ Mining District

_____ County, South Dakota

Located by _____

* * *

State of South Dakota)
County of LAWRENCE) ss

Office of Register of Deeds

I certify the within instrument was filed for record the 26 day of [illegible] A.D. 1951 at 2 o'clock and 30 minutes P.M. and recorded in Book 31 of Page 234 of location records of the Register of Deeds' office for said County.

[illegible] Register of Deeds

By _____ Deputy

Fee $1.00

* * *

State of South Dakota)
County of _____) ss

I, _____ Register of Deeds in and for said County and State do hereby certify that the within and foregoing is a full and complete and correct copy of the original.

_____ Location Certificate is the same appearing in record in Book _____ on Page _____ of Location Certificate record in my office.

Witness my hand and official seal, this _____ day of _____ A.D. _____

_____ Register of Deeds

Dma. 654

LODE LOCATION CERTIFICATE

KNOW ALL MEN BY THESE PRESENTS:

That I, Peggy Keenan d/b/a Keenan Properties of the County of Lawrence and State of South Dakota, claim by right of discovery and location, fifteen hundred feet linear and horizontal measurement on the Gold Bond No 1 Lode along the vein, with all the dips, variations and angles, together with three hundred feet in width on each side of the middle of said vein at the surface, and all veins, lodes, ledges and surface ground within the lines of said Claim fifteen hundred feet on the Lode running southerly from the center of the discovery shaft and 150 feet running south easterly from said center of discovery shaft being situated upon the said Lode within the lines of said claim in Rawline Mining district, County of _____ State of South Dakota, being more particularly described as follows, to wit: Bounded on the north by the Gold Bond No 2 on the east by the Three Jims No 6 on the south by the Three Jims No 5, on the west by the Gold Bond lode.

Said Gold Bond No 1 lode was located on the 26 day of April A. D. 1951

Attest:

Elizabeth Hazard

Locators:

Peggy Keenan d/b/a
Keenan Properties

206217

LOCATION CERTIFICATE

_____ Lode

_____ Mining District

_____ County, South Dakota

Located by _____

* * *

State of South Dakota)
County of LAWRENCE) ss

Office of Register of Deeds

I certify the within instrument was filed for record the 26 day of Apr. A.D. 1951 at 3 o'clock and 37 minutes P.M. and recorded in Book 311 of Page 235 of location records of the Register of Deeds' office for said County.

Milton A. Williams Register of Deeds

By _____ Deputy

Fee $1.00

* * *

State of South Dakota)
County of _____) ss

I, _____ Register of Deeds in and for said County and State do hereby certify that the within and foregoing is a full and complete and correct copy of the original.

_____ Location Certificate is the same appearing in record in Book ____ on Page ____ of Location Certificate record in my office.

Witness my hand and official seal, this ____ day of ____ A.D. ____

_____ Register of Deeds

Dma-654

LODE LOCATION CERTIFICATE

KNOW ALL MEN BY THESE PRESENTS:

That I, Peggy Keenan d/b/a Keenan Properties of the County of Lawrence and State of South Dakota, claim by right of discovery and location, fifteen hundred feet linear and horizontal measurement on the Gold Bond No 4 Lode along the vein, with all the dips, variations and angles, together with three hundred feet in width on each side of the middle of said vein at the surface, and all veins, lodes, ledges and surface ground within the lines of said claim fifteen hundred feet on the Lode running northerly from the center of the discovery shaft and 300 feet running easterly from said center of discovery shaft being situated upon the said Lode within the lines of said claim in Rawlins Mining district, County of _____ State of South Dakota, being more particularly described as follows, to wit: Bounded on the north by the Gold Bond No 5, on the west and southwest by U.S. 185-3, on the east by the Gold Bond No 3, on the south by the Gold Bond Lode.

Said Gold Bond No 4 lode was located on the 26 day of April A. D. 1951

Attest:

Elizabeth Hazard

Locators:

Peggy Keenan d/b/a Keenan Properties

206218

LOCATION CERTIFICATE

_____ Lode

_____ Mining District

_____ County, South Dakota

located by _____

* * *

State of South Dakota)
County of LAWRENCE) ss

Office of Register of Deeds
I certify the within instrument was filed for record the 26 day of Apr A.D. 1951 at 3 o'clock and 32 minutes P.M. and recorded in Book 311 if Page 236 of location records of the Register of Deeds' office for said County

Milton A. Walker Register of Deeds

By _____ Deputy

Fee $1.00

* * *

State of South Dakota)
County of _____) ss

I, _____ Register of Deeds in and for said County and State do hereby certify that the within and foregoing is a full and complete and correct copy of the original. _____ Location Certificate is the same appearing in record in Book _____ on Page _____ of Location Certificate record in my office.
Witness my hand and official seal, this _____ day of _____ A.D. _____

_____ Register of Deeds

dma-654

LODE LOCATION CERTIFICATE

KNOW ALL MEN BY THESE PRESENTS:

That I, Jeggy Keenan d/b/a Keenan Properties of the County of Lawrence and State of South Dakota, claim by right of discovery and location, fifteen hundred feet linear and horizontal measurement on the Three Jims No 5 Lode along the vein, with all the dips, variations and angles, together with three hundred feet in width on each side of the middle of said vein at the surface, and all veins, lodes, ledges and surface ground within the lines of said Claim fifteen hundred feet on the lode running south westerly from the center of the discovery shaft and 300 feet running south easterly from said center of discovery shaft being situated upon the said Lode within the lines of said claim in Rawlins Mining district, County of _____ State of South Dakota, being more particularly described as follows, to wit: Bounded on the northwest by M.S. 1853, on the southwest by M.S. 1787 on the south east by the Three Jims No 4, on the Northeast by the Gold Bond No 1.

Said Three Jims No 5 lode was located on the 28 day of April A. D. 1951

Attest:

Elizabeth Hazard

Locators:

Jeggy Keenan d/b/a Keenan Properties

206219

LOCATION CERTIFICATE

_____ Lode

_____ Mining District

_____ County, South Dakota

Located by _____

* * *

State of South Dakota)
County of LAWRENCE) ss

Office of Register of Deeds

I certify the within instrument was filed for record the 26 day of [illegible] A.D. 1951 at 3 o'clock and 37 minutes P.M. and recorded in Book 311 of Page 237 of location records of the Register of Deeds' office for said County

Milton C. Wilson Register of Deeds

By _____ Deputy

Fee $1.00

* * *

State of South Dakota)
County of _____) ss

I, _____ Register of Deeds in and for said County and State do hereby certify that the within and foregoing is a full and complete and correct copy of the original.

_____ Location Certificate is the same appearing in record in Book _____ on Page _____ of Location Certificate record in my office.

Witness my hand and official seal, this _____ day of _____ A.D. _____

_____ Register of Deeds

Dma-654

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

May 15, 1951

Mr. A. B. Needham, Executive Officer
Defense Minerals Administration, Region V
420 Plymouth Building
Minneapolis, Minnesota

Re: Keenan Placers, Spearfish, S. Dakota
DMA - ~~564~~ 654

Dear Mr. Needham:

You already know from the copy of our letter of May 3, 1951, addressed to Keenan Placers that the Defense Minerals Administration denied their request for a loan in the amount of $570,599, to be used for equipping and operating a tin placer near Spearfish, South Dakota. However, in the same letter, DMA advised Keenan Placers that it would consider their application for exploration assistance.

The Coordinating Committee agrees with your general recommendation that some preliminary test work should be done on the Keenan ground in order to provide a check on the mineral content of the gravels. In line with this view, we are today advising the Keenan interests that DMA is willing to bear the cost of sinking on contract, two test shafts in areas near the center of the channel and at points selected by their representatives. Though data are of course lacking, it appears that the gravel depth is not over 30 or 40 feet at the most; the sinking should not cost over $30 to $40 per foot, and should reach bedrock if possible. As stated above, the work will be done on contract and we request that you investigate the availability of possible contractors so as to be ready to start this work as soon as Keenan Placers indicate their approval to such a plan. After completion of each shaft, or during the sinking process thereof, DMA will conduct the sampling in such manner and detail as may seem appropriate to this agency. Keenan Placers will of course, also be allowed to undertake such sampling as they may desire.

We will advise you when we hear from Keenan Placers.

Yours very truly,

Chairman, Coordinating Committee

Approved:
Olaf L. Rove
for the Survey

for the Bureau

Tom Lyon

5/23/51

There is no DMA money to carry out the proposed test-pitting at DMA's expence. Do you want to hold until money for the 4th quarter arrives? An alternative is to propose a $5-10,000 DMA exploration project in which the applicant puts up his 10%. ~~the~~ Bureau of Mines could sample these pits so as to have reliable data available to DMA for consideration of the larger original proposal.

for R
POM

LANDON F. STROBEL

Don A-
654X

Keenan Properties
c-o W. C. Broadgate
421 Tower Bldg.,
Washington 5, D. C.
May 14, 1951.

Rec'd May 15 '51
W.B.

Mr. Tom Lyon, Director,
Supply Division,
Defense Minerals Administration,
Department of the Interior,
Washington 25, D. C.

Dear Mr. Lyon:

Supplementing Mr. Broadgate's letter of May 8, 1951 to Dr. Boyd, asking for a check on the sampling of Keenan Properties, I enclose herewith on form MF-103 an application for an exploration project. As form MF-100 together with the technical data on the property is already in the hands of DMA, we have not duplicated the information. Neither have we detailed the project or the requirements and cost breakdown as we feel it would be best, as this is a somewhat unusual case, to discuss these details with your experts and, if necessary, amend the application. A rough plan of approach is as follows:

In order to efficiently utilize an Exploration and Development fund under M O 5, and following the general practice adopted in lode mining, this being a placer project, Keenan Properties are making an application for $100,000 for the purpose of Exploration and Development of its Placer Deposits in accordance with the following general plan:

1. In lode mining, much of the equipment purchased for exploration and development can be used in later operation, such as drills, drilling steel, bits, rails, mine cars, ore chutes, compressors, etc.

2. In exploration and development of a placer deposit, the factors are different, but the same, or similar, conditions as apply to plac ers will apply, such as the securing of certain equipment and installing it, large portions of such equipment could be utilized for later production. It is not the intent or purpose under an exploratory loan to put the Keenan Properties into economic or profitable operation, but to prove the values contained in the gravel deposits controlled by the Keenan Properties, and provide a means for evaluating the property and work out the engineering factors for profitable operation.

3. Because of the yardage involved, and the known potential recoveries of critical and strategic minerals, it would appear that the exploration and development, based upon representative yardage, is advisable and reasonable, and we suggest the following plan, or one similar thereto, be inaugurated:

(a) To rent bulldozers, dragline and trucks, etc., for the excavation of the samples in various parts of the placers on a representative yardage basis, and the delivery of such material to_____.

(b) A washing plant located in the area which shall comprise a trommel screen, hopper, water line, pumps and tailing stacker, or method of disposal of such tailings.

(c) At the location decided upon, above-mentioned, to erect a plant which will have a rougher section and a refining or cleaning section to treat the material direct from the above-mentioned revolving screens, etc. This plant will be comprised of rougher and cleaner jigs, amalgamator, concentrating table and magnetic separator, to treat approximately 300 cubic yards per day.

4. Much of the equipment, if care is exercised in its selection, would be used in the later plant to be installed for the operation. This method would permit sampling of all Keenan Property placers on a fair and representative scale. In addition, it would provide concentrates for shipment to a laboratory for the separation of the metals contained. It would provide reliable data on yardage, costs and recoverable values, necessary for an expanded production operation. This work would, of course, have to be very carefully done, and due consideration given to the losses that would be excessive over a production operation of over-size materials, etc., that would not be handled in the above pilot cleaning plant.

By the above procedure, time and money would be conserved, and the value of the property shown, and valuable information obtained. It appears that with all the work that has been done on these properties, it is hardly necessary to go to this expense of time and money, and should it be necessary to satisfy the engineers, then the greatest and fullest utilization of time and money should definitely be made.

We do not withdraw our request for independent sampling, as per the conversation you had with Mr. Broadgate, but we wished to begin discussions on the exploration program at the earliest possible date and to file before the deadline for projects for the current fiscal year.

In addition, please understand that we are ready to amend within reason our MF-100 application for an operating loan to make it conform to your standards.

The seasonal aspect of this project, together with the critical situation with respect to the metals to be produced, urges me to ask your prompt consideration.

Sincerely,

Peggy Keenan
d/b/a Keenan Properties

PEGGY KEENAN
d/b as
KEENAN PROPERTIES.

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.
Approval expires 6-30-51.

APPLICATION FOR AID FOR AN EXPLORATION PROJECT PURSUANT TO MINERAL ORDER 5, UNDER DEFENSE PRODUCTION ACT OF 1950

DO NOT FILL IN THIS BLOCK

Docket No. DMA 654 X

Date received 5-15-51

Participation

Peggy Keenan
doing business as
Keenan Properties
c/o W. C. Broadgate
421 Tower Bldg.
Washington 5, D. C.

Name and address of applicant

Date May 14, 1951.

FILL IN THIS BLOCK

Date of application May 14, 1951.

Estimated cost $100,000

Mineral or metal Cb-Ta, Sn, WO_3

Percentage of Government participation $10,000

Location of mine Spearfish, S. D.

Date of filing MF-100 April 16, 1951.

DMA Docket Number, if available DMA - 654 X

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four signed copies of the application to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive officer thereof, with your name and address on each sheet of the application and all accompanying papers. If any question is inapplicable, or if you cannot answer it, so state on the form. Where the space provided for answer is insufficient, answer on a separate sheet, annex it to the application form, and refer to it in space for answer. If the application is approved, you will be presented with an exploration project contract on Form MF-200, for your signature.

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation?
*2. If a partnership, state names and addresses of partners.
*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders.
*4. Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project.
*5. Are you the owner or the lessee of the property?
6. If owner, state what claims, liens, or encumbrances, if any, are against the property.
7. If lessee, attach a copy of the lease and state if it is in good standing.

NOTE.—It will be necessary to procure and attach to the exploration project contract agreements of claimants, lienors, encumbrances and lessors subordinating their interests in the property to the interest of the Government under the contract.

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement.
9. How much money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the cost of the project as detailed in question 23 of this application form, in accordance with the regulations on Government participation (Section 9 of Mineral Order 5)?

*If you have already answered these questions on MF-100, you are not required to answer the questions for this application.

16—64067-1

THE PROPERTY

10. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property.

(*b*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted.

NOTE.—If both areas are the same, so state. The only obligation to repay the Government is from the net earnings from any commercial discovery made in the area specified in (*b*) above in which the exploration is to be conducted, and the expenditure of funds which may be charged as costs of the project must be limited to that area or to work necessary to perform the exploration in that area.

*11. State the present and former names of the property, if any.

*12. State, in detail, the location of the property with reference to towns, railroads, roads, shipping points, including distances and directions and kinds and conditions of roads.

*13. State source and quantity of water available for operations and its sufficiency at all seasons.
State amount of power to be used, rate per hour or other cost, and source.

*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work.

15. State in detail how the ore could be shipped and how and where milled.

*16. History:

(*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for any past suspensions of operations.

(*b*) State briefly the known history and production of adjoining and neighboring properties.

(*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

*17. Production:

(*a*) If mine is in production, furnish the following information:

	Tons per day	*Grade or analysis*	*Cost per ton*	*Net value per ton*
(1) Mining				
(2) Milling				
(3) Shipped or sold				

*18. Ore or mineral reserves: (If property is or has been operating.)

(*a*) Describe the ore or mineral deposits briefly.

(*b*) Submit available maps and assay data.

(*c*) Give estimated tonnage and grade of each class of ore reserves.

19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.

THE EXPLORATION

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted?

21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it.

NOTE.—The Government will not participate in a project that will require more than 2 years to complete.

22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data.

THE REQUIREMENTS AND COSTS

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:

(*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each.

(*b*) Supervisors, by numbers and positions, with salaries of each.

(*c*) Cost of necessary repairs to existing facilities, structures, and buildings.

(*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings.

(*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each.

(*f*) Cost of rental for equipment which the operator proposes to rent.

(*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work.

(*h*) Cost of materials and supplies, including items of equipment costing less than $50 each.

(*i*) Cost of power, water, utilities, and any other items not provided for above.

24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent.

CERTIFICATION

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this form and accompanying papers is correct and complete to the best of their knowledge and belief.

Keenan Properties — By Jerry Keenan
(Name of company) — (Signature of authorized official)

5/14/51 — Owner
(Date) — (Title)

Title 18, U. S. Code (Crimes), Section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

*Same as footnote on page 1.

16—64067-1 U. S. GOVERNMENT PRINTING OFFICE

O.E.E.

TELEPHONE CONVERSATION

DATE: May 11, 1951

PARTICIPANTS: Mr. Wm. Broadgate
421 Tower Building
Washington 5, D. C.

and

Landon F. Strobel
Executive Secretary, DMA

SUBJECT: DMA-654, Keenan Properties, Spearfish, South Carolina and question on Exploration Program.

Mr. Broadgate called Mr. Strobel with respect to two questions.

1. If an applicant has already filed an MF-100 and then desires to file an MF-103 for assistance under the Exploration program, is it necessary to repeat the information. Mr. Strobel advised him that it was not necessary.

2. Mr. Broadgate inquired as to the status of DMA-654. Mr. Strobel advised Mr. Broadgate that the application was being referred to the Field Team for examination.

Mr. Broadgate then stated that he was submitting an application for assistance under the Exploration program for this same applicant.

LFSTROBEL:hb
cc: Pennacette

. Strobel: I have written the applicant concerning this denial and have recommended that an application be made for an exploration loan telling ~~that~~ the applicant that it will be carefully considered.

Tom Lyon

Tom Lyon

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

May 3, 1951

Memorandum

To: Landon F. Strobel, Executive Secretary, DMA

Through: Director, Supply Division

From: Weston Bourret, Minor and Rare Metals Branch

Subject: Keenan Placers - Spearfish, S. Dakota
DMA docket - 654

During June 1949 the Bureau of Mines made a preliminary examination of the Spearfish area. Although no attempt was made to determine the average mineral content of the gravels, the results do indicate only very meager amounts of tin, columbite and tungsten. The Bureau yardage figures are based on visual examination and would normally be subject to revision. There is no way of checking the values claimed by the applicant without undertaking a systematic sampling program, which D. H. Mullen in his memorandum of November 4, 1950 estimates will probably cost in the order of $70 to $85,000 and will require at least five to six months to complete.

The applicant, Keenan Placers, has requested a loan of $570,599 in order to equip the property for a drag-line placer operation which will work about six or seven months out of the year. They propose handling about 430,000 cubic yards of gravel annually; the anticipated recovery from which is given, in round figures as about 240,000lbs. of tin, approximately 80,000 lbs. of columbite-tantalite and perhaps 4,000 units of WO_3 per season. According to Bureau-Survey reports it is doubtful if even a small percentage of this amount can be produced.

I recommend sending the attached letter to Keenan Placers denying their request for a loan to equip the property for operation.

Weston Bourret
Acting Chief
Minor and Rare Metals Branch

WBourret/mh/vwm
CC: Adm. Reading File
Mr. Strobel
Mr. Merrill
Mr. McKnight
Field Team Region V
Mr. Bourret
Mr. Lyon
Files

Approved:

Tom Lyon
ab

Director, Supply Division

May 3, 1951

Keenan Properties
c/o W. C. Breadgate
421 Tower Building
Washington 5, D. C;

Re: Keenan Placers - DMA 654
Spearfish, S. D.

Dear Sirs:

Your application dated April 16, 1951 for government assistance in the amount of $570,599 to operate a tin-columbite-tungsten placer has been reviewed by this office.

We are confident you will appreciate that DMA, in accordance with the provisions of the Defense Production Act, wishes to assist in the development of domestic tin reserves as well as other strategic minerals. However, in our judgment, Keenan placers has not been sufficiently tested by the usual and recognized procedures for determining the average mineral content per cubic yard contained in the gravels, and for this reason your request for assistance in the amount of $570,599 to equip and operate this placer is denied by the Defense Minerals Administration.

I am enclosing a press release dated April 11 concerning our exploration program. You will note that the government will participate up to 90% for exploration for columbium-tantalum and tin. If you care to make an application for government assistance in exploration, we will be very glad to consider the matter. I am enclosing, also, the necessary blanks for this purpose.

Yours very truly,

Tom Lyon, Director
Supply Division

Enclosures

WBourret/mh/vwm
TLyon/ad

cc: Adm.Reading File
Exec.Officer, Region V
Mr. Strobel
Mr. Lyon
Mr. McKnight
Mr. Merrill
Mr. White, USGS
Mr. Bourret
Files

Copy

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

May 3, 1951

Keenan Properties
c/o W. C. Broadgate
421 Tower Building
Washington 5, D.C.

Re: Keenan Placers - Spearfish, S. D.
DMA docket - 654

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Yours very truly,

Tom Lyon, Director
Supply Division

Enclosure

WBourret/mh/vwm

Adm. Reading File
Exec. Officer, Region V
Mr. Strobel
Mr. Lyon
Mr. McKnight
Mr. Merrill
Mr. White USGS
Mr. Bourret
F i l e s

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

May 3, 1951

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From: Weston Bourret, Minor and Rare Metals Branch

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Weston Bourret
Acting Chief
Minor and Rare Metals Branch

WBourret/mh/vwm
cc: Adm. Reading File
Mr. Strobel
Mr. Merrill
Mr. McKnight
Field Team Region V
Mr. Bourret
Mr. Lyon
F i les

April 14, 1949.
HEO:ldw

Captain H. C. Maull, Jr.,
Chief, Strategic and Critical
Materials Division,
Bureau of Federal Supply,
Treasury Department,
Washington 25, D. C.

Subject: Stockpiling Application - Kaspar Properties, Timber District, North Dakota.

Dear Captain Maull:

I enclose three copies of a memorandum just received from our Minneapolis Branch, which indicates that the examination cannot be undertaken until early in May because of snow conditions at the present time.

It will therefore be impossible to submit a report very soon, probably not until sometime during June.

Very truly yours,

LOWELL B. MOON
LOWELL B. MOON,
Chief, Mining Division.

Enclosure No. 278.

cc - Paul Zinner, 426 Plymouth Bldg., Minneapolis, Minn.
Mining Division
F i l e s

Mr Olney
2- 1 d

Paul Zinmer

April 8, 1949

A. B. Needham

File B.F.S. Keenan Properties

Examination - Keenan Properties

With reference to the proposed examination of the Keenan properties, as briefly discussed in the weekly report just submitted, please be advised that Gries and Tullis went to the property today and found that although roads into Tinton are passable, the property to be examined, as well as the surrounding country, is still covered with from 18 inches on the level to 3 feet of snow in the gulleys and low places, which precludes examination at this time.

At the property they contacted a caretaker by the name of I. H. Bilyeu, who informed them that as far as he knew there had been no activity of any kind on the Keenan property since last fall when a small amount of underground work was done; but according to Bilyeu, no work was done on the placer diggings. No core drilling has been done, but Gries says there is a centrifugal pump at the property which was not there when he visited the area last year. Otherwise, he noticed no changes.

It is questionable as to when the snow will be melted. Should a warm rain come it would probably go away over night, but the roads would then be quite muddy and probably impassable. It is believed that a new attempt should not be made for about 3 weeks or maybe even longer. We will try to keep in touch with the ground conditions and will examine the properties as soon as possible.

A. B. Needham

DKM

cc Moss (through Zinmer)

SUMMARY OF MINING PROPOSITION

Keenan Placers, Spearfish, S. D. * DMA Docket 654

Submitted by: Keenan Properties, Spearfish, S. D., by Peggy Keenan, on April 16, 1951.

Data Submitted: (a) NSRB ~~146~~ Form 146, with attachments.
(b) Schedule of equipment requirement.
(c) Report on tin gravels of Bare Creek and Potatoe Creek by W. C. Driskill, dated October 27, 1949.
(d) Sampling maps and assay certificates.
(e) Claim and sampling maps showing location of pits.

Location: Bare and Potatoe Pits near Tinton Area; Lawrence County, South Dakota. Elevation is around ~~67,000~~ 6 or 7000 ft.

Loan Requested: (a) Dragline equipment and Power Plant, $136,7775.
(b) Placer equipment including washing and cleaning plant, $43,000.
(c) Construction and assembly fund, $58,374.
(d) Dams, transportation, buildings, and improvements, $55,250.
(e) Research on chemical separation process, $42,700.
(f) Power and light facilities, $13,250.
(g) Repayment of accounts, $36,500.
(h) Working capital and contingency fund, $174,750.00
Total applied for: $570,599.

Placer Deposits: In an area of approximately 10 miles long ~~and~~ by 4 miles wide, there is a possibility of there existing some 3,000,000 yards of aluvial gravel in creek valleys, which contain a small ~~xxxx~~ percentage of tin, columbium, taltanum, gold and tungsten. At least 2,000,00 ~~yxxx~~ yards of this amount lies in the broad valleys with an average depth of somewhere between 6 and 30 feet.

Bedrock consists of a soft decomposed porphyry, hard indurated limestone and solicified dikes. In general the gravels are fine averaging plus 50% minus 1/2 inch size. Folders of over 2 feet in diameter are in common except in isolated areas. The gravel washes easily and contains little or no sticky clay. ~~XXXXXXXXXXX~~ Cassiterite, Scheelite ~~xxxxxxxxxx~~ and Columbite are believed to have concentrated in extreme valleys following erosion of the precamborium, tintum petmatites.

During the months of September and October, 1949 Mr. W. C. Driskill, Civil Engineer, undertook preliminary testing of the property ~~xxxxx~~ for the Peggy Keenan interests. Sample maps ~~xxxxxxxxxxxxxxxxxx~~ accompanying the report show 50 trenches and 49 test pits were dug on Bare and Potatoe Creeks. Apparently, about 10 of these pits went to Bedrock. Some 18,000 linear feet of channel were sampled on Bare Creek and about 12,000 linear feet on Potatoe Creek; test pits are spaced at around somewhere ~~xxxx~~ 400-600 feet.

Sample cuts tend to a concentrate for shipment and analysis. Chemical analysis done by Oscar Dribach, Aurora, Colorado.

~~Such a program~~ would probably cost in the order of $70,000 to $85,000 and require at least 5 to 6 months time.

~~XXXXXXXXXXXXXXXXXXXX~~

WALTER S. BARIN
CHAIRMAN

PUBLIC LANDS COMMITTEE

HOME ADDRESS
HENDERSON, NEVADA

Congress of the United States
House of Representatives
Washington, D. C.

[illegible], 1951

Mr. James Boyd
Administrator
Defense Minerals Administration
Department of the Interior
Washington [illegible], D. C.

Dear Mr. Boyd:

There has been brought to my attention Docket DMA-054 [illegible] request for an approval by DMA of procurement contracts [illegible] for the production of [illegible], tantalum, tin and [illegible] from the Keenan properties, a placer near Deerfish, Scott [illegible].

I also note the contents of a letter from you to Keenan [illegible] March [illegible], in which you state, "An expansion of supply of tin, [illegible], tantalum, and [illegible], is very much to be desired and you may be assured that the staff of the DMA will make every effort to see that [illegible] gets an answer given prompt and thorough consideration." I am pleased to see this because I understand that shortages of cassiterite and tantalite may result in a serious bottleneck in the stockpile acquisition program, to such an extent, indeed, that the production of these minerals is a secondary factor.

I am further informed that water must be impounded in the spring and that operations must commence when the weather permits, making haste imperative.

The Research and Production Division of DMA appears to be intimately familiar with these placers and their potentialities and having already negotiated a small contract, would be glad to write larger ones upon your certification of the property.

It seems to me that in cases where there is no doubt whatever of the urgent need for a metal or mineral, and where its scarcity is so clear that the Government offers to match exploration funds on a 90-10 basis, there should be some way of putting the [illegible] into prompt operation by directive, cutting out the usual red tape and routine delays.

Sincerely yours,

Walter S. Barin

WALTER S. BARIN, [illegible]
Special [illegible]
Strategic Minerals [illegible]

WSB mab

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 3 0 1951
LANDON F. STROBEL
Executive Secretary

Bourret - reply - Boyd

DENNIS CHAVEZ, N. MEX., CHAIRMAN
JOHN L. McCLELLAN, ARK. HARRY P. CAIN, WASH.
SPESSARD L. HOLLAND, FLA. EDWARD MARTIN, PA.
JOHN C. STENNIS, MISS. GEORGE W. MALONE, NEV.
VIRGIL M. CHAPMAN, KY. HENRY C. DWORSHAK, IDAHO
ROBERT S. KERR, OKLA. FRANK CARLSON, KANS.
THOMAS C. HENNINGS, JR., MO. FRANCIS CASE, S. DAK.
FRANK BURNETT, CHIEF CLERK

United States Senate

COMMITTEE ON PUBLIC WORKS

April 26, 1951

Dr. James Boyd
Administrator
Defense Minerals Administration
Department of the Interior
Washington 25, D. C.

Dear Dr. Boyd:

We have in the Black Hills of South Dakota some stream placer deposits containing tin, tungsten, columbite and tantalite. One of the principal deposits is known as "Keenan Properties", which has filed an application with Defense Minerals Administration for procurement contracts and operating funds with which to produce for the Government these critical minerals.

It scarcely is necessary to point out to you how essential it is that we have domestic sources of these strategic minerals, especially those necessary in the manufacture of military aircraft. I also want to point out that the operating season in South Dakota is short. Time is of the essence.

It seems to me that every effort should be made to put these properties into operation at once. The owners of the property have put in a great deal of effort and money in test surveys and exploration. Their results indicate approximately 1,116,000 pounds of tin, 289,000 pounds of columbite, 9,600 units of tungsten (WO_3), and other valuable elements in the stream gravel without considering underground possibilities.

As you know I have seen the tables of procurement in considering estimates for the General Services Administration, in the House last fall. To ignore or to fail to do whatever is necessary to recover these minerals for the strategic stockpile would be indefensible.

Let me know if you need information to supplement that already on file. May we get action on this at once?

With kindest personal regards, I am

Sincerely yours,

Francis Case

g

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 27 1951
LANDON F. STROBEL
Executive Secretary

1/29/51 Bennett copy to Bell

dmr 6844

KEENAN PROPERTIES

SPEARFISH, SOUTH DAKOTA.

April 16, 1951.

Dr. James Boyd, Administrator,
Defense Minerals Administration
Department of the Interior
Washington 25, D. C.

Dear Mr. Boyd:

I am filing herewith a revised application for a production contract and a loan on the Keenan Properties, based upon the emergency requirements for columbite, tantalum, tungsten and tin. This will supersede any previous requests or applications.

Aside from the extensive testing results shown on the supporting data sheets Dr. Driggs of the Fansteel Metallurgical Corporation has agreed to furnish the Government with information concerning its operations which showed substantial results in the same area.

When a field examination is ordered we should like to be notified of the date so that we may have our representative present.

The record of sampling, recorded production and sale of Cb - Ta is, we feel, such as to make a very careful consideration of this project imperative considering the urgent necessity for the vital minerals which can be produced.

Kindly address any correspondence or inquiries about this application to

Keenan Properties
c/o W. C. Broadgate
421 Tower Building
Washington 5, D. C.

The General Services Administration informs us it is eager to contract for the minerals that Keenan properties can produce and the Department of Defense also has shown a strong interest.

Any additional information which we can furnish will be supplied upon request.

Sincerely,

Peggy Keenan
d/b as Keenan Properties.

cc: Miss Peggy Keenan

KEENAN PROPERTIES
Spearfish , South Dakota
April 16, 1951

Under date of February 16, 1951, we sent Mr. Malcolm H. Carpenter, Research and Development Division Emergency Procurement Service, a letter of transmittal with three proposals for contracts addressed to Captain H. C. Maull, Jr., Chief Emergency Procurement Service, General Services Administration. The contract proposals offered the highly strategic metals - Columbium-Tantalum, tin, tungsten, and request was made that General Services Administration transmit our proposals to you with a request for certification of our placer project by Defense Minerals Administration according to the authority granted in the guaranteed loan-contract clause of the Defense Production Act of 1950, Sec. 302.

The attached technical data was obtained by certified records of pilot plant operation and a complete placer survey by a competent engineer, who had previously studied our stream gravel deposits and geology for a number of years. In support of Keenan Properties data, may we bring to the attention of your office the following Dept. of Interior documents which reveal the presence of the same metals in the pegmatite dikes as these reported in our streams flowing through these dikes.

Report of Investigations	3404
" " "	3336
" " "	4484
Information Circular	7069
" "	7054
" "	7084
" "	7319
" "	7550
Geological Survey Bull.	922-T

Duffy Construction Co.

March 29, 1951

Kanawha Properties
Jefferson Hotel
Washington, D. C.

Dear Sirs:

Your letter of February 16, addressed to Malcolm Carpenter, Emergency Procurement Division, General Services Administration, regarding the supply of tin concentrates, columbite-tantalite, and tungsten, has been referred to me for reply.

The information contained in your letter indicates that Government assistance in the form of a loan will be a condition to undertaking the operation from which the above named strategic minerals would be produced.

The position of the Defense Minerals Administration with respect to such an application for assistance was set forth in a letter addressed to you from the Administrator, dated March 5. As far as we have been able to determine the Kanawha Properties has not resubmitted its application for assistance since the Duffy Construction Company withdrew from the proposal.

This latest communication from you is being placed in the docket, DMA-654.

Very truly yours,

Tom Lyon

Tom Lyon, Director
Supply Division

CWMarrill/exp

Copy to - Minerals Division
Tom Lyon
A. J. Walsh, GSA
Field Team
Bugs Metals
Jack W. Clark
F I L E S

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

March 8, 1951

Keenan Properties
The Jefferson Hotel
1200 16th Street, N.W.
Washington, D.C.

Dear Sirs:

Your letter of February 7, a letter dated January 19 from E. J. Duffy, Duffy Construction Corporation, addressed to Charles E. Wilson, Director of the Office of Defense Mobilization, and a proposal on the Keenan Properties, Spearfish, Lawrence County, South Dakota, carrying DMA Docket Number 69, all in connection with assistance under the Defense Production Act of 1950 in producing strategic minerals, are before me.

Since Mr. Duffy's letter was written he called on the Defense Minerals Administration to discuss his part in the proposal which resulted in his stating he was not interested in proceeding and was withdrawing from the project.

I note in your letter of February 7 that the Department of the Interior will not be permitted access to the Keenan Properties except under special conditions providing that the Department's sampling will be checked as to methods and results by an engineer, presumably in your employ, but acceptable to the Department. Although the DMA is happy to have applicants or their representatives present when engineering examinations are being made, the Administration is not willing to make it a condition of an examination that there be provision for such a check.

In view of the fact that Mr. Duffy has withdrawn since your application was filed, it is suggested that you withdraw the application as transmitted to my Deputy James Douglas by Fred Searls, Jr., Office of Defense Mobilization. If you wish to resubmit it on a revised basis I shall see that it is given prompt consideration by the DMA staff. Such consideration would almost certainly include some resampling so that ore reserve estimates could be prepared comparable to those you submit.

The test work that the Bureau of Mines has done in the area where the Keenan Properties is located was not undertaken to check the reserves in your holdings. The sampling appears to have covered a somewhat different area although it seems that much of the gravel tested and measured was included in both examinations. The pits and

and drill holes from which the Bureau of Mines samples were taken probably were different from those from which the Keenan Properties samples were taken and there probably was some difference in the attention given bedrock material. Nevertheless, the two jobs were so related areally that closely checking results would be expected. There is, however, an extremely wide divergence as to the estimates of minerals present particularly with respect to columbite.

Field reports indicate that seasonal conditions would delay such rechecking for some weeks which should provide ample time for the preparation of any application you care to make. An expansion of supply of tin, columbium, tantalum, and tungsten, is very much to be desired and you may rest assured that the staff of the DMA will make every effort to see that your proposals are given prompt and thorough consideration.

A copy of this letter is going to Mr. Duffy for his information.

Sincerely yours,

JAMES BOYD

Administrator

CWHarrill/erp

Deputy Administrator, DMA

Copy to - Minerals Division, Bureau of Mines
Tom Lyon
E. F. Strobel
Base Metals - 1 to Jack W. Clark
F i l e s
Field Team, Region V
Fred Searls, Jr.
Ofc of Defense Mobility

February 13, 1951

Memorandum

To: Operating Committee

From: Mr. James Douglas

Subject: Tin, Columbium, Tantalum and Tungsten Production from the Keenan Properties, Spearfish, Lawrence County, South Dakota

Referred to you is the attached presentation on the above-captioned property and accompanying letter from E. J. Duffy of the Duffy Construction Corporation. The latter letter was addressed to Mr. Charles E. Wilson, Chairman of the Office of Defense Mobilization, and referred to this office by Mr. Fred Searls, Jr., Consultant to Mr. Wilson. Will you please see that the letter to Mr. Duffy is acknowledged and that as soon as possible enough information and data are made available on which to base a reply to the Duffy proposal.

James Douglas
Deputy Administrator

Attchs.

JDouglas/GMcC

cc: Files
Adm. reading file
Mr. Strobel
Mr. Douglas

DON F. STROBEL

2-2-51
Mr. Wall
action

My dear Senator Spaeth:

This will acknowledge your letter of January 31 with reference to the Thomas Properties in Spearfish, South Dakota. The subject properties seem to be vigorously promoted, as I have already discussed the matter with Secretary Chapman and referred it to the Defense Minerals Administrator last month.

There is no argument about the critical status of the antimony supply. However, I am assured by the Defense Minerals Administrator that it is present only in insignificant amounts on the Thomas Properties. The prospectability is low, and I am sure he is sufficiently aware of the pending shortage of the metal so that he would be very much inclined to receive any funding in favor of an adequate survey of the properties.

I see no reason why I should support a loan from the General Services Administration or other attention to this property until or unless the Defense-Minerals Administration determines that it is of some economic interest.

Sincerely,

Charles E. Wilson

Honorable John Spaeth
Chairman, Select Committee on
Small Business
United States Senate
Washington, D. C.

FS:ih to:2/7/51 IX-553
CC: Mr. Wilson
Mr. Searls
Gen. Clay
Mr. James Boyd, DMA
Central Files

1 3 1951 3:20 AM
BUREAU OF MINES
WASHINGTON D.C.

LANDON F. STR...

KEENAN PROPERTIES.
Spearfish, So. Dakota.

The Jefferson Hotel,
1200 16th. St. N.W.
Washington, D.C.

7 February, 1951.

Dr. James Boyd,
Director of the Bureau of Mines,
U.S. Department of the Interior,
Washington, D.C.

Dear Dr. Boyd:

Regarding our request for a Certification according to The Defense Production Act of 1950, we are advised that you are arranging for some kind of engineering check on Keenan Properties' data verifying the presence of columbite-tantalite, tin, tungsten and gold, in commercial quantities, in our Bear and Potato Creek stream gravel deposits.

Under date of December 5, 1950, your office advised Senator John Sparkman that the stream values were represented by the Department of the Interior preliminary check as containing a 2:I ratio of tungsten to tin. This is quite contrary to all records and supporting data which shows a consistant, different ratio of approximately 3:I tin to tungsten. (Ratio Chart enclosed.)

When the Bureau of Federal Supply requested the 1949 check on tin and tungsten values in Keenan Properties streams, no request was made for assays on columbite-tantalite. Consequently, the representation in the letter to Senator Sparkman, indicating a "trace" only of this mineral is extremely misleading. Further, in a telephone call to Mr. Charles E.Shaver, General Counsel, Senate Select Committee, in early January 1951, we are advised your Minerals Division reported that the Department of the Interior had made a second check of some kind and had found columbite-tantalite which was represented vaguely as "low values". It is a recorded fact that 12,000 pounds of commercial grade concentrates containing columbite-tantalite and tin was recovered from a limited area on Bear Creek by a well-known Metallurgical Corporation. (Bear Creek is identifiable in your "Statement On Tin" August 8,1950, Appendix I. as one of "The Tin-Tantalite Placers" of Lawrence County, South Dakota.)

In view of the above reported results of the preliminary check of Keenan Properties' Placers containing important and strategic minerals for which there is a drastic need for National Defense; the months of time already wasted by the Bureau of Mines certification procedure; the large amount of money

(Dr. James Boyd, continued)

expended by Keenan Properties in the careful analysis of the contained values in 6½ miles of stream gravels; in view of the fact that Keenan Properties have never been permitted to see the Bureau of Mines Report on Keenan Properties Placers; and that our investigation indicates that the engineers who made the report did not include a placer mining engineer, we request you to notify Keenan Properties at our Washington address, when a competent Department of the Interior engineer is scheduled to visit our properties, so that a recognized placer engineer, who is a member of the AIMME and acceptable to the Department of the Interior, may accompany the Department of the Interior engineer and take duplicate samples and compare the methods employed.

At a time when the world's supply of columbite-tantalite is so critical, and the United States imports 100% of its requirements for the manufacture of vital jet engine parts and other essential uses for which no satisfactory substitute has yet been developed, and at a time when tin and tungsten are in critical short supply for the National Defense program, a domestic source of these minerals, in however small a tonnage, warrants immediate aid from the government, particularly in view of the present high market values for all of the minerals involved, thereby assuring a profitable operation.

Until we hear from you regarding the above request, at the Washington address, we withhold permission for anyone to visit our properties.

Very truly yours,

Keenan Properties

KEENAN PROPERTIES

c.c/ Mr. Charles E. Wilson,
Senator John Sparkman,
Senator James Murray,
Mr. E.J. Duffy,
Mr. Charles E. Shaver.

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF DEFENSE MOBILIZATION
WASHINGTON 25, D. C.

OFFICE OF THE DIRECTOR

January 23, 1951

Mr. James Douglas
Deputy Minerals Administrator
Department of the Interior
Washington, D. C.

Dear Jim:

Herewith I enclose reports on alleged columbium, tantalum, tin and gold property in South Dakota. This was brought in to Mr. Charles Wilson who referred it to me, although I think he talked to Secretary Chapman about it first.

I don't think it is any good, and if it is any good it belongs in your Department anyway.

Very truly yours,

Fred Searls, Jr.

Enclosure

FS:hts:1/23/51

RANDON F. STROBEL

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

JAN 26 01 PM '51
BUREAU OF MINES
WASHINGTON, D.C.

January 23, 1951

Memorandum

To: Non Ferrous Metals Committee, DMA, New Interior Building, Washington 25, D. C.

Through: Regional Director, Bureau of Mines, Region V

From: Executive Officer, DMA BM-GS Field Team, Region V

Subject: Keenan Properties, Lawrence County, South Dakota

Keenan Properties in the northern Hills has been the focal point for considerable attention by the Bureau of Mines since 1949, when a stockpiling application was made to General Services Administration. Considerable field work ensued, then, which resulted in a report being transmitted, over the writer's signature, indicating the estimated yardage of gravel available on the Keenan holdings together with the probable yield of tin and tungsten (columbium and tantalum were not considered then). It was pointed out that, to make a thorough and systematic determination of actual quantities, more than a short examination would be necessary and the probable cost would approximate $70,000.

The property was again discussed in November 1950, when a request was made to re-examine the previously submitted report in view of a second report having been made by W. C. Driskill, who indicated yardages but especially mineral content considerably in excess of the Bureau estimate. A second report submitted by this office indicated the Bureau's views of the Driskill report and pointed out discrepancies that existed between the two. It was again indicated that if more accurate data were necessary to substantiate either of the reports, the systematic sampling program would have to be initiated at from $70,000 to $85,000 and would require some 5 or 6 months to complete. Since the second report was transmitted, columbium and tantalum analyses of the previous samples were made and the quantity of mineral content determined to be less than 0.01 percent of each.

Although it is noted your memorandum of January 12, 1951, advises to hold in abeyance any check sampling which might be contemplated, I am wondering whether or not the Director had in mind the thorough, systematic project which was recommended by the aforementioned reports or just another series of samples such as was taken in 1949. The latter will not clear up any misunderstanding between

the Driskill sampling and that done by the Bureau by the very nature of the scattered plan of test pits. The former systematic scheme will determine beyond doubt the potential of the gravels; but since Defense Minerals Administration funds available under appropriation 1415909.016 are not applicable to such type of work to be done by the Bureau, and regular "52" money to the Mining Division of Region V has been committed to projects underway and therefore not available for such a large project, where do we get funds for the sampling project?

It is agreed that Keenan Properties will undoubtedly make application for a Defense loan and that the Bureau should be in a position to determine the feasibility without too much field investigation; but it is felt that the discrepancies in mineral content will not be reconciled until a thorough job of sampling is done, so I do not see how we can be better prepared than now (except for that mineral content of the gravels). On the basis of what the Bureau knows of the area now, conclusions would have to be that such an undertaking as would be proposed by Keenan Properties would not be feasible for the moderate production of tin, tungsten, columbium, or tantalum.

A. B. Needham

A. B. Needham

Mr Merrill (for Mr Clark)

UNITED STATES
DEPARTMENT OF THE INTERIOR

BUREAU OF MINES
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

January 19, 1951

Memorandum

To: Chief, Minerals Division, Bureau of Mines, Washington, D. C.

From: Chief, Mining Division, Region V

Subject: Keenan Placer Property, Lawrence County, South Dakota

Pursuant to your memorandum of January 12, 1951, there are attached the original report of the tin-bearing placer gravels of Bear and Potato Creeks, Tinton area, South Dakota, by W. C. Driskill and the three original pen maps.

Although the report by Mr. Driskill is supposedly the original copy, it is not a signed copy; it is, however, the one transmitted to this office.

Copies of both report and maps had previously been made here and copies are retained for our files.

A. B. Needham

A. B. Needham

Enclosures

REPORT ON THE TIN-BEARING PLACER GRAVELS OF BEAR AND POTATO CREEKS, TINTON AREA, LAWRENCE COUNTY, SOUTH DAKOTA

by

W. C. Driskill

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REPORT OF THE TIN-BEARING PLACER GRAVELS OF BEAR AND POTATO CREEKS, TINTON AREA, LAWRENCE COUNTY, SOUTH DAKOTA

by

W. C. Driskill

INTRODUCTION

This report on the placer gravels of Bear and Potato creeks is for the purpose of recording the yardages and values as found by the writer and his associates during September and October of 1949.

With the exception of the 12-year period from 1931 to 1943, during which the writer tested, examined, and in some cases worked the placers of Sand Creek, Mallory Gulch, Bear Creek, Potato Creek, and Iron Creek, no attempt has been made to recover the valuable concentrates known to be held in these stream gravels until Keenan Properties began their tests and operations in the fall of 1948.

While the report deals entirely with the Bear and Potato Creek placers, including part of the Beaver Creek placer grounds, the 12 years of previous examination and working are naturally considered. To undertake a thorough examination of these two streams and their adjoining bars and ledges in a few weeks would result in information lacking necessary detail.

In this area, approximately ten by four miles in extent, there are approximately 3 million cubic yards of alluvial gravel in the creek valleys, showing tin, gold, tungsten, and columbium-tantalum. Part of this yardage is in shallows and sometimes narrow valleys, but at least 2 million cubic yards are in broad valleys 6 to 30 feet deep. There are also several known high channels of pre-Tertiary time which carry values. I estimate these high bars to carry over 4 million cubic yards.

The areas covered in this report are accessible. To conduct the recent testing on Bear Creek a caterpillar was used, building a passable road from 70 Flats to above Nigger Gulch. Good Forest Reserve roads are close to Potato Creek and to Keenan Properties mill site (leased from Dakota Tin and Gold Company) and their present placer operations in Potato Creek.

Boulders over 2 feet are uncommon except in isolated parts of Bear Creek and in small areas of Potato Creek. The percentage of minus half inch is plus 50 percent. The gravel washes easily with no sticky clay to speak of, particularly in Bear Creek. Since the tin and gold are generally coarse there is practically no slime loss. Bedrock varies from soft, decomposed porphyry and schist to hard, indurated sandstone and silicified dikes. Storage and conservation of spring run off is essential for any washing operation. Rainfall is light but there are heavy winter snows resulting in high spring levels, which can be stored by use of adequate dams. Operations are seasonal, six to seven months being an average season. Elevation is five to six thousand feet. There is a good camp and mill buildings on Keenan Properties, approximately a mile and a half from Tinton.

The Tinton pegmatites were intruded into the pre-Cambrian schists in Cambrian time. It is estimated that two or three thousand feet of depth has since been eroded. The Tinton pegmatites show good tin, tungsten, columbite-tantalite and gold values in what remains of these pegmatites. The erosion resulted in an accumulation of heavy minerals in the valleys which drained the pegmatite dikes. In Tertiary time, the country was upset by intrusions of monzonite porphyry, cutting across the old channels and interrupting them. In time, the drainage was re-established and there resulted a series of basins above where the creeks broke through the intrusive dikes. These basins filled with gravel and formed collecting areas where the heavy minerals collected. Many of these basins remain untouched.

BEAR CREEK PLACER

Bear Creek has its origin around the Nigger Hill pegmatite at Tinton, South Dakota. It goes past several tin and columbite-tantalite-bearing pegmatites for approximately a mile before it reaches Nigger Gulch at Bear Town. There is considerable scheelite in the placers at this point (Section 35, Map 1). Tests in 1942 showed 1/2 pound of tin per cubic yard above Bear Town and 1 pound metallic tin per cubic yard below Bear Town. Scheelite in the concentrates ran well over 10 percent. Water flow varies from 1,600 gallons per minute in the spring, to 300 gallons in the middle of August.

Approximately a third of a mile downstream from Nigger Gulch, another unnamed gulch enters Bear Creek from the west. It originates in the northern part of Nigger Hill and carries tin and gold. Where it enters Bear Creek (Section 32, map 1), tests indicate extremely high gold values per cubic yard and metallic tin at approximately 1 pound per cubic yard. These earlier tests did not include bedrock run through.

At the head of every one of the small gulches in this area there seems to be thin gravel, usually springs originate there and the muck and overburden is generally to a depth of 10 feet. Centennial Gulch runs past several tin-bearing pegmatites and carries both gold and tin. As with Nigger Gulch, it is steep and narrow and can be most practically worked with a small unit.

Two test trenches dug in 1942 just across Bear Creek above Centennial, produced $200.00 in gold and 200 pounds of tin concentrate, and $100.00 and 400 pounds of tin concentrate (65 percent metallic tin) respectively. Samples taken from this section during October 1949 show the same or higher values (Section 31, map 1). The average here is $3.00 in gold per cubic yard, 1 pound of tin and 1/4 pound columbite-tantalite.

Two Bit Gulch (Section 27, map 1) is a small, narrow gulch similar to Nigger and Centennial gulches. It carries columbite-tantalite as well as tin in the concentrates. There seems to be little scheelite at this point. Below Two Bit, Bear Creek again widens out into another basin (Section 26) in which we also ran trenches during 1941 and 1942. This particular basin carries approximately 30,000 cubic yards of workable gravel averaging 35 cents in gold and 1 pound of metallic tin in concentrates carrying 10 percent columbite-tantalite.

Immediately below this basin is a bottleneck and another large basin (Section 24, map 1). From this point below the log cabin shown on map 1, to Connor's Rock, the gravel gets deeper rapidly, averaging 25 cents per yard in gold as far as Connor's Rock. Below this rock the gravel was too deep even for the old timers to work. Little of this area had ever been touched until the 1949 survey.

On the west side of Bear Creek, adjoining Wyoming Gulch, are large, high bars formed by the bend in Bear Creek around Connor's Rock (Section 18, map 1). From Connor's Rock to Seventy Flats, with an average working width of 200 feet, an average depth of 12 feet (in some instances 20 feet), and a distance of over 3,000 feet, this represents approximately 270,000 cubic yards, to which should be added approximately 30,000 cubic yards in high bars adjoining. Taking in all the gravel in upper Bear Creek, approximately 670,000 cubic yards, the Sawmill Creek gravel (approximately 170,000 cubic yards) we have a conservative total of 845,000 cubic yards of workable gravel.

The upper Bear Creek stream area only, approximately 670,000 cubic yards, was tested by pits and trenches during September-October 1949. (See table 1). The writer estimates that approximately 635,000 pounds of metallic tin are recoverable from this area, exclusive of an estimated conservative 30,000

pounds contained in adjoining high bars. In addition to the tin, approximately 215,000 pounds of columbite-tantelite and 210,000 pounds of scheelite (WO_3) are recoverable.

POTATO CREEK PLACER

Potato Creek, long ago, was a part of Beaver Creek, with Bear Creek flowing into it where there is a dip in the road above the turnoff to the Dakota Tin & Gold mill (now leased to Keenan Properties). This original Potato River had a considerably larger flow as attested by the depth of gravel and large boulders in the channel. The present Potato Creek originates in springs three-quarters of a mile south of the mill buildings on the Homeward Bound claim. At this mill Potato Creek is approximately 400 feet higher than Bear Creek, over the ridge. It goes past an old gravel bar, originally Bear River, then makes a right-angle turn to the northeast past the mill, passes through a narrow gorge, above which is the present pilot washing plant operated by Keenan Properties and enters a small basin of Johnny Perrett's old ground. Here very coarse gold is found. This seems to be true wherever present channels are in close proximity to the old River channels, such as Two Bit Gulch and Iron Creek.

A quarter mile below Perrett's old ground is a large basin which averages 3/4 pound metallic tin per cubic yard and 60 cents in gold. The ground situated in Section 10-13, Map 2, has several side gulches - Pearl, Hardscrabble, Hardpan, and Tenderfoot, all of which run up into the ancient river channel and all of which carry gold, tin, columbite-tantalite, scheelite and, in Tenderfoot, barites as well. There is a total of 32,000 cubic yards, not including the old River channel on the west side, on this property.

Below section 10 gravel values are estimated to be the same as above. Here, Potato Creek makes a sharp swing eastward after passing through a

narrow gorge (Section 8). Bank samples taken here carry visible coarse gold. These placers are estimated to contain 36,000 cubic yards of gravel with tin values as above but with higher gold and columbite-tantalite values. At Section 4 the Placer Survey 392 begins.

During the recent examination in October, this lower portion of Potato Creek showed more tin and gold than had been estimated during my earlier, preliminary tests. Values from Section 4 to the junction of Potato and Beaver creeks show approximately 65 cents in gold per cubic yard and one pound of tin in concentrates containing columbite-tantalite and scheelite. Three out of every six pans showed gold colors, with considerable scheelite in every one.

In the deeper gravels of Beaver Creek (Sections 20 to 26, map 2) there has been little previous placering done. Thirteen pans from the spoil of three old test pits were washed and assayed 0.44 pound tin and 26.2 cents gold per cubic yard. No bedrock samples were taken because of high water levels resulting from early snows.

The values contained in the old River channel are unknown. However, these high bars should turn out to be highly profitable providing the overburden can be economically stripped. On the ridge east of Potato Creek, south of Ferrett's Section 14-15, there is close to 800,000 cubic yards of gravel; west of this section there appears to be 10,000 cubic yards. West of Sections 10 to 12, map 2, is the remaining gravel running to Two Bit gulch, approximately 200,000 cubic yards. In all there is a total of approximately 1,010,000 cubic yards of gravel in the old River channel.

Exclusive of adjoining high bars, previously tested by the writer, the Potato Creek placer gravels from Sections 1 to 16 carry approximately 320,000 pounds of metallic tin, 110,000 pounds of columbite-tantalite and conservatively

125,000 pounds of scheelite in the form of (WO_3). In view of the favorable recovery ratios in gold as produced by Keenan Properties pilot plant in gravel previously estimated to contain approximately 60 cents gold per cubic yard, a minimum recovery of 60 cents per cubic yard for Potato Creek can be anticipated.

SAMPLING AND RECOVERY DATA

During September and October 1949, 50 test trenches and 49 test holes or pits were dug in the Bear and Potato Creek areas. Samples were cut only in the walls of these excavated pits and trenches.

Vertical channel cuts 12 inches wide and 8 inches deep were made from top to bottom of all pits and trenches. These cuts were spaced at 6-foot intervals and weight of gravel averaged 40 pounds per linear foot of channel. The gravel was collected on canvas and alternate shovels from each channel pile was taken for sample. The final sample thus obtained for each pit or trench was then mixed and quartered by shovel, weighed, panned down to concentrate for analysis and sacked for shipment. A total of 1,859 feet of channel cuts were made which after quartering produced 9,316 pounds of sample for panning to concentrate. Approximately 12.25 pounds of concentrate was recovered and shipped for analysis.

A rocker was used but later discarded as a means of cleaning the samples since values were found in the tailings after a second run through the rocker. Samples were panned down to a concentrate which most nearly approached the grade produced by the present washing plant now operating in Potato Creek. Panning was favored because of the wide range in size of material, minus 200 mesh, recovered by screen test, to extremely coarse material as represented by the columbite-tantalite nugget panned above Two Bit Gulch, Section 23, map 1, which weighed 51.5 grams and measured 1-1/2 inches in length.

Examination and test of the Bear and Potato Creek placer gravels, using hand panning to produce concentrates, at the same time that Keenan Properties were operating their pilot washing plant on Potato Creek, afforded the writer an opportunity to compare recovery efficiencies.

The efficiency of a dozer-dragline fed revolving trommel, combined with Pan American Placer Jigs, as used in Potato Creek by Keenan Properties appears to be considerably higher than hand panning, having the advantage of larger capacity and better ability to handle the values immediately above and on bedrock.

From my personal observation of the above pilot washing plant, it appears that the use of Pan American Placer jigs as adapted by Keenan Properties is the most practical and efficient recovery method for the Bear and Potato Creek placers.

While much of the Potato Creek placers and part of upper Bear Creek have been worked by hand for gold, the recovery of extremely high gold values during the recent test, is believed to be the result of proper use of bull-dozer equipment in reaching and exposing the decomposed schist and prophyry bedrock in areas difficult for hand operation and sluice box methods. The 425,000 cubic yards of Bear Creek, from Section 13 to Section 20, with deeper gravel, while difficult for hand placer operations, offers no obstacles for modern machinery and methods. Much of the gravel between the above sections is estimated by the writer to carry values upwards of $3.00 per cubic yard.

Table 1. - Test, Sample and Analysis Data, Bear Creek Placer Survey, September 1949

Section	No. and type of excavation	Channel cuts feet	Sample weights: Panned Pounds	Sample weights: Concentrate Grams	Analysis: Percent Sn	Analysis: Percent WO_3	Analysis: Percent Cb_2O_5 Ta_2O_5	Analysis: Oz. per sht.tn. Au	Remarks
13 13	1 trench 1 pit	42) 20)	300	195	25.8	3.2	3.6	196.70	Coarse concentrate; bedrock sampled
14	2 pits	32	155	107	33.6	3.5	7.4	115.49	Water on br.
15	2 trench-	65	325	253	38.2	3.1	8.8	48.81	Water on br.
16	2 pits	30	160	149	49.9	.85	9.9	7.20	Br. sample
17 18	1 trench 1 pit	35))	180	219	40.0	1.8	3.7	66.82	Br. sample
19	1 trench	40	280	sample destroyed					nbr sample
20 20	2 trench 2 pits	39))	200	91	24.5	2.1	2.9	4.87	Br. sample nbr sample
21	1 trench	26	135	55	53.2	.1	6.7	4.13	Br. sample
22 23	1 pit 1 pit	18))	90	136	45.3	1.1	6.7	3.40	Br. sample Br. sample
24	2 trench	22	110	66	33.3	.4	4.4	28.08	nbr. sample
25 25	1 trench 1 pit	) 40)	200	83	23.4	2.9	5.5	.86	nbr. sample nbr. sample
26 26	2 trench 1 pit	42) 16)	285	178	22.8	3.2	5.4	5.10	Br. sample nbr. sample
27	1 trench	23	150	sample destroyed					Br. sample
28	2 pits	22	100	253	35.4	1.5	12.7	28.79	Cb-Ta nugget 51.5 grams
29	1 trench	21	105	300	43.2	1.4	7.0	2.84	nbr. sample, talc ledge
30	2 pits	40	200	130	32.3	1.9	8.8	1.48	1st talc ledge exposed
31	2 trench	65	330	161	20.9	2.7	12.9	155.82	Very coarse gold br.
32	2 pits	44	220	168	30.2	2.6	9.1	245.93	Coarse visible gold br.
33 33	1 pit 2 trench	41))	205	147	24.1	1.6	4.3	22.34	Br. sample
34	1 trench	36	180	139	34.2	1.7	8.7	3.31	Br. sample
35 35	4 trench 1 pit	68) 12)	400	416	29.7	1.9	7.6	53.08	Coarse material Visible gold
36	1 trench	40	190	74	30.3	2.2	8.0	17.10	Br. sample
37 38	2 trench 1 pit	55) 11)	340	180	26.1	1.9	8.9	1.24	Br. sample Shallow gravel
39	2 trench	60	175	102	23.2	1.9	8.5	20.86	Br. sample

Br. - bedrock sample
nbr. - no bedrock sample taken

See map 3 for estimated yardage and recovery values.

Table 2. - Test, Sample and Analysis Data, Potato Creek Placer, October 1949

Section	No. and type of excavation	Channel cuts feet	Sample lots: Panned Pounds	Sample lots: Concentrate Grams	Analysis: Percent Sn	Analysis: Percent WO_3	Analysis: Percent Cb & Ta_2O_5	Analysis: Oz. per sht.tn. Au	Remarks
1	2 trench	40	200	89	28.1	2.0	7.6	15.61	Br. sample
2	2 trench	65)	400	144	39.6	4.4	13.1	19.89	Br. sample
2	1 pit	15)							nbr. sample
3	1 trench	25	120	82	32.8	1.9	7.4	14.78	nbr. sample
4	1 trench	27	135	104	34.1	8.5	8.0	52.24	Br. sample
5	1 pit	12	55	33	27.4	.3	6.3	51.70	Br. sample
6	1 pit	18	90	84	22.7	.8	5.6	85.45	Visible coarse Au
7	1 trench	20	100	73	31.5	8.0	6.5	5.18	Visible coarse Au
8	1 trench	34	166	78	21.0	3.3	6.6	253.83	High bank cuts
9	1 trench	22	100	83	37.5	1.9	9.1	31.84	nbr. sample
10	1 trench	35)	250	169	39.7	2.9	11.9	3.17	Water on br.
10	1 pit	15)							nbr. sample
11	1 trench	20)	165	127	27.0	6.1	7.0	11.81	Previously placered
12	1 pit	13)							for gold
13*	1 trench	20	100	66	12.6	1.1	2.9	14.27	Overburden note.
14	2 trench	26	140	88	31.9	7.0	6.5	9.58	nbr. sample
15	2 pits	no sample taken							Narrows
21	2 trench	75	400	185	31.9	8.1	8.0	1.49	Coarse Cb-Ta
22	1 trench	35	200	94	23.4	8.0	7.4	.04	Coarse Cb-Ta
23	1 trench	50	240	173	27.3	3.7	7.6	.60	nbr. sample
24	1 trench	39	210	127	25.0	5.2	7.0	2.49	nbr. sample
25	2 trench	80	385	300	19.9	8.7	7.7	9.05	Visible gold
26	2 trench	62	320	200	28.2	7.9	7.0	.43	nbr - water
27	1 trench	53	280	152	24.7	6.7	6.7	.60	nbr - water
28	1 trench	48	245	151	25.1	6.9	6.6	.45	nbr - water

* Overburden begins to exceed 6 inches. Stripping necessary up to area worked by pilot plant 1948-49. (Section 16, map 4)

See map 4 for estimated yardage and recovery values.

SUMMARY

The purpose of this report is to establish, so far as possible, the yardages and values of the Bear and Potato Creek placer gravels. Examination of these gravels show the following:

Bear Creek

From Seventy Flats, a total of 805,000 cubic yards of gravel available, including the Sawmill Creek area. If lower Seventy Flats are included, the total will be approximately 1,395,000 cubic yards.

During previous tests, concentrates recovered from test pits, trenches and actual working of gravels showed an average value of 35 cents per cubic yard in gold, 1 pound of metallic tin and high values in scheelite and columbite-tantalite.

During September and October, 1949, 26 sections, each 600 feet in length were surveyed on Bear Creek. Twenty-nine trenches and 21 test holes or pits were dug by caterpillar and dozer, from these excavations 5,015 pounds of gravel was sampled by panning. This panning recovered 3,502 grams or 7 pounds of concentrates, a ratio of 3.2 pounds recoverable per cubic yard of 2,300 pounds. These panned concentrates have an average specific weight of 2.9 as compared with the specific weight of 3.0 calculated for "shipping grade" of 40 percent tin, 10 percent scheelite and 10 percent tantalite, approximated from the specific weight of a control sample of known analysis.

For lower Bear Creek, water is available all year round and sufficient for expanded large scale washing operations. For upper Bear Creek, dams and conservation of water is, in my opinion, essential.

Potato Creek

A total of 399,000 cubic yards available, including terraces and part of Placer Survey 392, from Section 15, map 4, to the junction of Potato and Beaver Creeks.

During September and October, 1949, 24 sections, each 600 feet in length were surveyed on Potato Creek. Thirty-four trenches and 15 test pits were dug and tested. From these excavations 4,301 pounds of gravel was sampled by panning. This panning recovered 2,602 or 5-1/4 pounds of concentrates, a ratio of over 2.5 pounds recoverable per cubic yard of 2,800 pounds. These panned concentrates have an average specific weight of 2.7 as compared with the specific weight of 3.0 for shipping grade concentrates (see Para. 3, Summary, Bear Creek).

Exclusive of recoveries by the Keenan Properties washing plant now in operation, and my previous examination and work on Potato Creek, I estimate the entire Potato Creek to carry values of approximately 1 pound of tin per cubic yard, 60 cents gold per cubic yard in concentrates containing 10 percent in scheelite and columbite-tantalite.

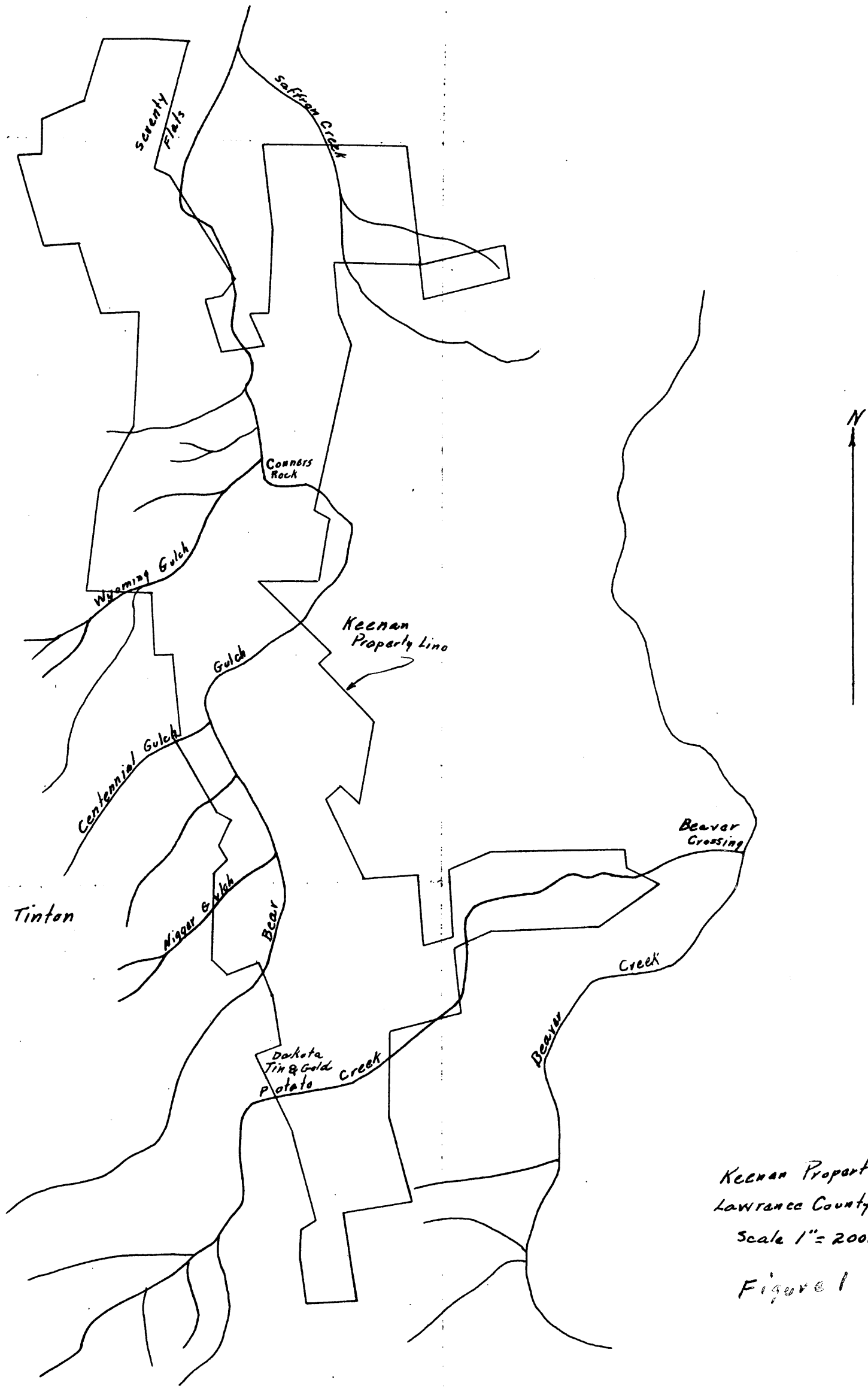
Dams and conservation of spring flood water will be essential for any washing plant operation in the Potato Creek Placers.

GENERAL

The present machinery being operated by Keenan Properties is capable of a small and limited daily production with inevitable high costs. The same crew at approximately the same or lower cost can and should operate a larger washing plant capable of handling at least 850 cubic yards per 8-hour shift.

While both Bear Creek and Potato Creek carry well-proven values in the present channels, it is the opinion of the writer that more attention should be paid to the high bars and old river channels, with their greater yardages and probable high values. It is also the opinion of the writer that both Bear and Potato creeks can be placered at a profit. Costs on lower Bear and lower Potato creeks will be much less than on the upper levels, due to such factors as shallower gravels, higher pumping heads, narrower channels and steeper grades.

W. C. Driskill
October 27, 1949



Keenan Properties
Lawrance County S. Dak
Scale 1" = 2000'

Figure 1

REGIONAL DIRECTOR

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

2908 COLFAX AVENUE SOUTH
MINNEAPOLIS 8, MINNESOTA

~~Minerals~~ Division
Mr Merrill
for Clark
for (Keenan file)

January 19, 1951

Memorandum

To: J. H. Hedges, Chief, Minerals Division
Washington, D. C.

From: Regional Director, Region V

Subject: Keenan Properties, South Dakota

Attached are the results of check analyses made at the Minneapolis Laboratory on samples collected last summer during investigation of the Keenan placer.

The samples are identical to those run at Salt Lake. You already have the returns from Salt Lake.

While the combined tantalum-columbium obtained at Minneapolis is slightly higher than that obtained at Salt Lake, the conclusion is the same.

Paul Zinner
Regional Director, Region V

Att.

BUREAU OF MINES
WASHINGTON, D. C.

JAN 23 7 58 AM '51

JAN 23 1951

Minerals Division

UNITED STATES
DEPARTMENT OF THE INTERIOR

BUREAU OF MINES

1600 EAST FIRST SOUTH STREET
SALT LAKE CITY 1, UTAH

Division
by J. H. Hedges, Chief
1. [illegible]
2. [illegible]
3.
Reply for sig. J. H. Hedges
Action
Comments
Your information

January 3, 1951

Air Mail

Memorandum

To: Mr. J. H. Hedges, Chief, Minerals Division, Bureau of Mines, Washington, D. C.

From: Mr. S. R. Zimmerley, Chief, Metallurgical Division, Region IV, Salt Lake City, Utah

Subject: Columbium and tantalum samples from the Tinton district, South Dakota. (Keiman)

This refers to a letter of C. E. Wood to me dated December 13 stating that 23 samples of material from the Tinton district, South Dakota were being sent to Salt Lake at the request of J. H. Hedges for analyses of columbium and tantalum.

In response to your teletype December ~~18~~ 19 we sent you a teletype December 29 giving general results.

The attached assay sheets Nos. 1 and 2 give the results of the individual determinations. You will note that the columbium and tantalum content in all cases was extremely low, usually less that 0.01 percent. The presence of tantalum and columbium was verified spectrographically; however, when the oxides from all 23 samples were combined into one product to supply sufficient material for a quantitative determination, the average was approximately 0.005 percent tantalum and 0.005 percent columbium for the entire lot.

S. R. Zimmerley

S. R. Zimmerley

Copy to: C. E. Wood
Paul Zinner
A. B. Needham
J. H. East, Jr.

BUREAU OF MINES
MAIL ROOM
WASHINGTON, D.C.
JAN 5 2:00 PM '51

6-303
(March 1947)

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
Salt Lake City, Utah

No. 1

Report to Mr. J. H. Hedges

Chemical Laboratory Report

Date received Dec. 20, 1950

Date reported Jan. 3, 1951

Serial No.	DESCRIPTION	Lot No.	Cb_2O_5	Ta_2O_5
	Tinton			
93398		1C	<.01	<.01
99		2C	<.01	<.01
93400		3C	<.01	<.01
1		4C	<.01	<.01
2		5C	<.01	<.01
3		8C	.01	<.01
4		9C	<.01	<.01
5		10C	<.01	<.01
6		11C	<.01	<.01
7		12C	.01	<.01
8		13C	<.01	<.01
9		14C	<.01	<.01
93410		15C	<.01	<.01
11		16C	<.01	<.01
12		17C	<.01	<.01

U. S. GOVERNMENT PRINTING OFFICE 16—33553-3

Signed H. E. Peterson

6-303
(March 1947)

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
Salt Lake City, Utah

No. 2

Report to Mr. J. H. Hedges

Chemical Laboratory Report

Date received Dec. 20, 1950

Date reported Jan. 3, 1951

Serial No.	DESCRIPTION	Lot No.	Cb_2O_5	Ta_2O_5
	Tinton			
93413		18C	<.01	<.01
14		19C	<.01	<.01
15		20C	<.01	<.01
16		21	<.01	<.01
17		22	<.01	<.01
18		23	<.01	<.01
19		24	<.01	<.01
93420		25	<.01	<.01

Note: There is definitely a trace amount of tantalum and columbium in these samples. Combining all the oxides obtained from the 23 samples into one product and determining this product we get an average value of approximately .005% Ta_2O_5 and .005% Cb_2O_5 for the entire lot.

U. S. GOVERNMENT PRINTING OFFICE 16—33553-3

Signed H. E. Peterson

This goes with the Keenan file

SPECIAL

J. H. Hedges

12-29-50

(1:10)

WASH BU MINES 310 GO AHD PLS

BUR OF MINES SU 89 DEC 29 11.10 AM

J H HEDGES

REYURTEL DEC. 18, CHEMICAL ANALYSES OF KEENAN SAMPLES FOR COLUMBIUM AND TANTALUM. CONTENT ALL SAMPLES SO LOW THAT IT WAS NECESSAR X NECESSARY TO REASSAY ALL SAMPLES. INITIALANALYTICAL RESULTS S W CRUDE COLUMBIUM PLUS TANTALUM OXIDES LESS THAN 0.08 PERCENT. SPECTROGRAPHIC ANALYSIS BEING MADE TO VERIFY PRESENCE OF ANY COLUMBIUM OR TANTALUM. AIRMAIL LETTER FOLLOWS.

S R ZIMMERLEY

END MR PLS ACK

OK END C

Salt Lake City, Utah

WASHINGTON
DEC 29 1 45 PM '59

DEC 29 1959
BUREAU OF MINES
MATERIALS DIVISION

SPECIAL

and [illegible] file

J. H. Hedges
~~Mr. Burrell~~
CHM.

12-2050

(11:55)

WASH BU MINES 310 GO AHD PLS

BUR OF MINES SU 89 DEC 20 9.55 AM

J H HEDGES

REURTEL. KEENAN SAMPLES RECEIVED HERE DEC 18. DETERMINATIONS ALREADY IN PROCESS AND WILL MAKE EVERY EFFORT TO HVE XX HAVE THEM COMPLETED SOME TIME NEXT WEEK.

S R ZIMMERLEY

END MB PLS ACK

OK END C

Salt Lake City, Utah

Secretary's Notes

Referred by J. H. Hedges, Chie

To: 1.....

2.....

3.....

..... Reply for sig. J. H. Hedges

..... Action

..... Comments

..... Your information

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

J.W.C. ~~J. H. HEDGES~~
~~Bob Wilson~~
2 - Jack Clark
For your information

December 12, 1950

Memorandum

To: J. H. Hedges, Chief, Minerals Division, Washington, D. C.

From: Chief, Mining Division, Region V

Subject: William C. Driskill, South Dakota

For your background information on the subject engineer, we have found that Mr. Driskill was graduated from the South Dakota School of Mines in 1928 with a B.S. degree in Civil Engineering. In 1939 he was known to have been connected with Bear Creek Mining Co., Spearfish, S. Dak., as Superintendent. (A note in the Minerals Yearbook indicates the Bear Creek Mining Co. in 1937 was operating placer ground of the Black Hills Tin Co. and that they washed 12,000 cubic yards of gravel in a dry land dredge. Recovery was 43 ounces of gold equivalent to .0036 ounces per yard, $0.126 at $35 per ounce.

Mr. Driskill's address in 1946 was at Black Hills Tin Co. and currently he is known to be manager of the Campstool Ranch, Devils Tower, Wyoming.

Don Mullen informs me that Guy March, Professor of Mathematics and one of the leaders of the Alumni group, School of Mines, Rapid City, is a very close friend of Mr. Driskill, that the Driskill family is quite well off financially, and that they own the Campstool Ranch. March says that Driskill is active in the summer on the ranch and in the winter he goes to California and writes books. March was of the opinion that Driskill just sort of dabbles in mining as a hobby or side line.

Apparently one should conclude that Mr. Driskill is not necessarily a competent authority in placering; however, the accuracy of his sampling and, for that matter, yardage figures on the Keenan Property can be determined more conclusively by further sampling, but I would be of the opinion the Bureau's conclusion will have been proven to be quite accurate. I certainly would not stick my neck out for a sustained commercial enterprise based on tin and tungsten. We will know about the probable content of columbium and tantalum as soon as a few samples which are being run here in Minneapolis and at Salt Lake, too, are known.

A. B. Needham

A. B. Needham

BUREAU OF MINES
WASHINGTON, D. C.

DEC 15 8 37 AM '50

DEC 15 1950

J.W.S.
R.H.R.

UNITED STATES
DEPARTMENT OF THE INTERIOR

BUREAU OF MINES
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

December 6, 1950

Memorandum

To: Chief, Minerals Division, Washington, D. C.

From: Chief, Mining Division, Region V
Through: Regional Director, Region V

Subject: Keenan Properties, Lawrence County, South Dakota
(1 sent to Central Files)

Attached are five copies of a letter report from D. H. Mullen, Supervising Engineer, Rapid City field office, made after consideration and careful study of a new report submitted by W. C. Driskill on the merits of producing tin, tungsten, and columbite from the subject property.

In the matter of yardage, I have no doubt that Driskill's figures and our figures would approximate each other if only the property of Keenan were considered and not the whole of the various creeks. All of certain creeks are not on Keenan property. Further, according to the Driskill map, Potatoe Creek is much longer than actual.

We cannot attempt to agree on grade of commodities. Our results in no way compare with those of Driskill. Driskill did not simulate his sampling figures by his own work years ago.

Originally we set out to cursarily substantiate yardages and grade as indicated in their application for a G.S. contract and did not attempt to estimate accurate yardage and grade. If an accurate appraisal is deemed advisable, then a systematic trenching or test pitting and sampling job is necessary, as indicated throughout all of our reports and correspondence. Meanwhile, you can study the opinions of the examining engineers. No doubt we will get a D.M.A. application for assistance, and it's going to be a toughie!

A. B. Needham

A. B. Needham

Attachments 5

BUREAU OF MINES
WASHINGTON, D. C.

DEC 11 4 14 PM '50

UNITED STATES
DEPARTMENT OF THE INTERIOR
Bureau of Mines

Rapid City Field Office
School of Mines Campus
Rapid City, South Dakota

November 14, 1950

Memorandum

To: A. B. Needham, Chief, Mining Division, Region V

From: Supervising Engineer, Rapid City Field Office

Subject: Keenan Placer Property, Lawrence County, South Dakota

I have carefully studied the report and other data on the subject property by W. C. Driskill and have discussed the situation quite thoroughly with Tullis and Gries.

It should be pointed out that the examination by the Bureau of Mines in June 1949 was strictly of a preliminary nature. No attempt was made to determine the value of the gravel in any location and the samples collected were taken at places where the owners indicated high grade gravel existed. The fact that the samples, which were carefully collected, concentrated and analyzed, did not contain any significant quantity of mineral should be indicative of a very erratic deposit as far as values are concerned. The yardages estimated were strictly by visual examination and would normally be subject to radical revision in the event areas and depths were carefully measured.

The current report appears to be an attempt, on the part of the owners, to substantiate claims of values that were not confirmed during the last examination. To that end the Driskill report based on work conducted in September and October 1949 is submitted. To arrive at a just and reasonable estimate of the gravels and their content, the

report and the competence of its author should and must be carefully considered. The following analysis is not made with any intent of destructive criticism, but rather a comparison of the data set forth in the report with data that is known to exist and can be substantiated.

W. C. Driskill, the author, was graduated from the South Dakota School of Mines in 1928 as a Civil Engineer. Other than his experience from 1931 to 1943 in the placer deposits near Tinton, there is no further record of mining experience. According to Minerals Yearbooks for that period the Driskill Company was active in 1939 and 1942. During 1939 the company handled 8,400 cubic yards of material from Potato Creek producing 36 ounces of gold and 2 ounces of silver. This is equivalent to .0044 ounce of gold per cubic yard. In 1942 2,800 yards of material was handled from the same area and 14.5 ounces of gold and 1 ounce of silver were produced. This is equivalent to .005 ounce of gold per cubic yard. The purpose of including this data is because the results of that work are considered in the preparation of the subject report.

15.4 d/yd

17.5 d/yd

The geology of the area as described in the Driskill report is incorrect in several instances. The report states that the pegmatites, which he correctly designates as the "mother lodes" from which some of the valuable minerals in the placer deposits were derived, were intruded in Cambrian time. Actually the pegmatites were intruded during pre-Cambrian time and were subjected to an undetermined amount of erosion before being covered by deposition of the marine sedimentary rocks of Cambrian and younger age.

It is also stated that the surface drainage courses were established and then disrupted by the intrusion of igneous Tertiary rocks. Actually, the drainage courses were established following the uplift that was accompanied by igneous intrusions. This discrepancy is pointed out because of the statement that valuable deposits were concentrated

in basins formed by a change in drainage courses and caused by Tertiary intrusions. These details of geologic history are set forth in U.S.G.S. Bulletin 922-T, pp. 599-604, "Tin-Bearing Pegmatites of the Tinton District, Lawrence County, South Dakota," by Ward C. Smith and Lincoln R. Page, 1941, and in U.S.G.S. Geologic Atlas 219, p. 25, "Central Black Hills Folio, South Dakota," by N. H. Darton and Sidney Paige, 1925.

Reference is made to "known high channels of pre-Tertiary time." Geologists of the U.S.G.S. have not described any pre-Tertiary channels and it is safe to assume that they do not exist. Assuming that such channels might exist but of a later age than postulated in the Driskill report, a careful search was made in 1949. The search was based on a detailed description contained in a previous report by Driskill based on his experience from 1931 to 1943. No trace of these channels could be found along the ridge between Potato Creek and Bear Creek, although the Driskill report described them in that location. Further, the geologic map accompanying Bulletin 922-T does not show terrace gravels in the places described but does show them in other places, notably at Seventy Flats.

The sections concerning the description and rather hazy account of grade are not critically analyzed as there is presented no evidence to substantiate the claims of grade. It is noted, however, that frequent reference is made to the high terrace gravels and basins formed by Tertiary intrustions that have not been substantiated by careful geologic mapping or recent careful examination.

The Sampling and Recovery Data are notable for its lack of detail. The mere statement that 50 test trenches and 49 test holes were dug in the Potato and Bear Creek areas is of little value as there

are no data to indicate where the excavations were located, in what direction the trenches were placed, the depth of the excavations, or other necessary information. In this connection one trench was noted that probably was excavated in September of 1949. As near as can be determined it was in either section 13 or 14 on Potato Creek, as shown on the Driskill map. The trench was 20 to 30 feet long, 2.5 to 3 feet deep, and was along the bank and parallel to the stream. It was also on a curve where a high concentration of values would be expected.

There is no criticism of the manner in which the samples were collected and concentrated. There is, however, no information regarding the area influenced by each sample.

The maps submitted with the report do not show the location of trenches or pits and no data are available as to depth of gravel or the area considered in the calculation of yardages.

The Driskill map No. 4 of Potato Creek is completely in error. A claim map showing the outlines of the Keenan property was provided by the owners during the examination in 1949. This map is drawn to a scale of 1 inch equals 1,000 feet, as is the Driskill map. By superimposing the Driskill map on the claim map it is seen that the Driskill maps show Potato Creek to be 2,500 feet longer than shown on the claim map.

The outline of the Keenan property was transferred to the geological map that accompanied U.S.G.S. Bulletin 922-T. Known points were found to register exactly and it can be assumed, therefore, that the transposition is reasonably accurate. This map, shown as figure 1, shows that a considerable portion of Potato Creek and a part of Bear Creek are outside the boundaries of the Keenan property. The yardages

assigned to these areas in the Driskill report must, therefore, be eliminated from the total.

In the Summary it is stated that the concentrates were compared, in specific weight, to the specific weight of a control sample of known analysis. Presumably this means specific gravity. A simple calculation will show that a given volume containing 40 percent tin (50 percent cassiterite, approximately) 10 percent scheelite, 10 percent columbite-tantalite, plus 30 percent of an unnamed mineral but presumably of high gravity such as magnetite since the product is a concentrate, will have a specific gravity in excess of 6. The extent to which this relationship has been used is not stated but appears to have been used in all cases where individual samples are not given. It apparently is not a justifiable method.

An analysis of tables 1 and 2 attached to the report show that of 30 samples taken within the boundaries of the Keenan property 10 of them apparently reached bedrock. In the Bureau of Mines investigation, of 15 samples taken within the same areas, 8 of them reached bedrock.

A further analysis of the tables was made and individual samples were reduced to show the content of tin, tungsten, columbium-tantalum, and gold per cubic yard. It is to be noted that where coarse gold and a large nugget of columbite-tantalite was found there was no adjustment made, but the results applied over the entire yardage within the particular section.

The calculation of samples contained in the Driskill report within the Keenan property boundaries are as follows:

	Values per cubic yard						
	Driskill section number	Total ozs. concentrate per cu. yd.	Ounces tin per cu. yd.	Ounces WO_3 per cu. yd.	Ounces Cb_2O_5 Ta_2O_5/ cu. yd.	Ounces gold per cu. yd.	Total[1/] value per cu. yd.
Potato Creek	7	72	22.7	5.8	4.9	.0116	$ 3.37
	8	46	9.8	1.5	3.1	.364	14.04
	9	82	30.7	1.6	7.5	.0859	6.41
	10	67	26.5	1.9	7.9	.00663	3.43
	11) 12)	76	20.6	4.6	5.3	.0280	3.76
	13	67	8.4	.7	1.9	.0298	1.97
	14	62	19.6	4.3	4.0	.00185	2.51
Bear Creek	13	64	16.5	2.1	2.3	.3929	15.44
	14	68	23.0	2.4	5.0	.246	12.22
	15	77	29.2	2.4	6.8	.1173	7.47
	16	95	47.5	.8	9.4	.0213	5.54
	17) 18)	119	47.9	2.2	4.4	.248	12.99
	19	No sample					
	20	45	11.0	.9	1.3	.00686	1.30
	26	62	14.1	1.9	3.3	.00984	2.02
	27	No sample					
	28	248	87.8	3.7	31.5	.2076	18.29
	29	272	117.1	19.0	19.0	.01039	13.50
	30	64	20.7	1.2	5.7	.024	3.23
	31	48	10.1	1.3	6.2	.2342	9.83
	32	76	22.8	1.9	6.9	.578	23.03
	33	71	17.1	1.1	3.1	.0496	4.30
	34	77	26.2	1.3	6.7	.01986	2.78
	35	103	30.5	2.0	7.8	.1707	9.48
	36	38	11.6	.8	3.1	.02043	2.05
	37) 38)	52	13.6	1.0	4.4	.00203	1.76
	39	58	13.3	1.1	4.9	.0484	3.45

1/ Value calculated on the following prices: tin, $1.12 per pound; WO_3, $38.50 per unit; columbite-tantalite, $2.25 per pound; and gold, $35.00 per ounce.

An examination of this table shows unusually high values for placer deposits. While it cannot be denied that such values could exist, in view of the grade of past and currently operated placer deposits, not only in the Black Hills but in other locations as well, a prudent engineer would make some further check of his results to verify the unusual values

obtained. Further, these values are at a wide variance with the results apparently obtained by the author during actual mining operations during 1939 and 1942 in Potato Creek where these unusual values were found in 1949.

A tabulation of yardages as estimated in the Driskill report and the Bureau of Mines within the Keenan property lines is as follows:

	Yardage			
	Driskill Report, 1949		U.S.B.M. Report, 1949	
	Location (Section)	Cubic yards	Location (blocks)	Cubic yards
Potato Creek			A	6,000
			B	5,000
	15	2,500	C	18,000
	12, 13, 14, 15	94,830	D	30,000
	10, 11	99,630	E	65,000
	8, 9	45,540	F	30,000
	7	20,000	G	17,000
Total, Potato Creek		285,000		171,000
Bear Creek	38, 39	17,950	H	5,000
	37, 38	16,650	I	6,500
	36	8,330	J	8,000
			K	250
	33, 34, 35	21,660	L	23,000
	30, 31, 32	16,335	M	23,000
	26, 27, 28, 29, 30	68,255	N	40,000
	19, 20	21,000	O	30,000
	17, 18, 19	90,850	P	67,000
	16, 17	37,150	Q	78,000
	13, 14, 15	263,325	R	145,000
Total, Bear Creek		561,505		425,750
Saffron Creek				120,000
Seventy Flats		855,000		100,000
TOTAL, ALL AREAS		1,701,505		796,750

The greatest difference in yardage appears to be in one section of Potato Creek, the lower part of Bear Creek, and at Seventy Flats. There are numerous references in the Driskill report to yardages that

are difficult, if not impossible, to locate without a more detailed map.

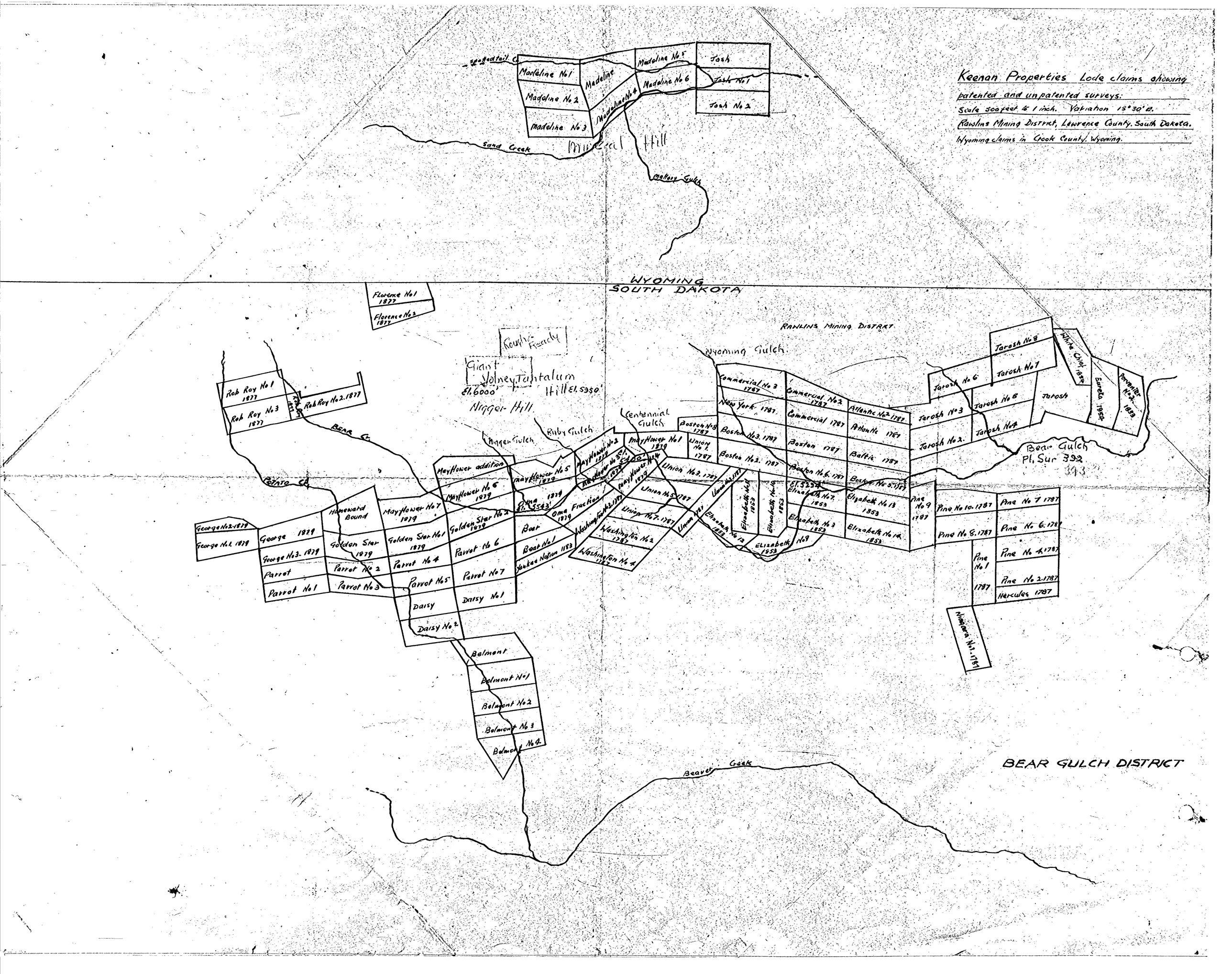
There has been no attempt to compare values set forth in the two reports as they differ so greatly any comparison would be ridiculous.

It must be realized that the investigation by the Bureau of Mines was intended primarily to verify grade and yardages claimed by the owners. Analysis of samples believed to have been taken from the highest grade gravel did not show the values claimed. The estimation of yardages was largely a matter of judgment and it is evident that yardages indicated in the Driskill report are based on no more detailed or extensive data than that of the Bureau.

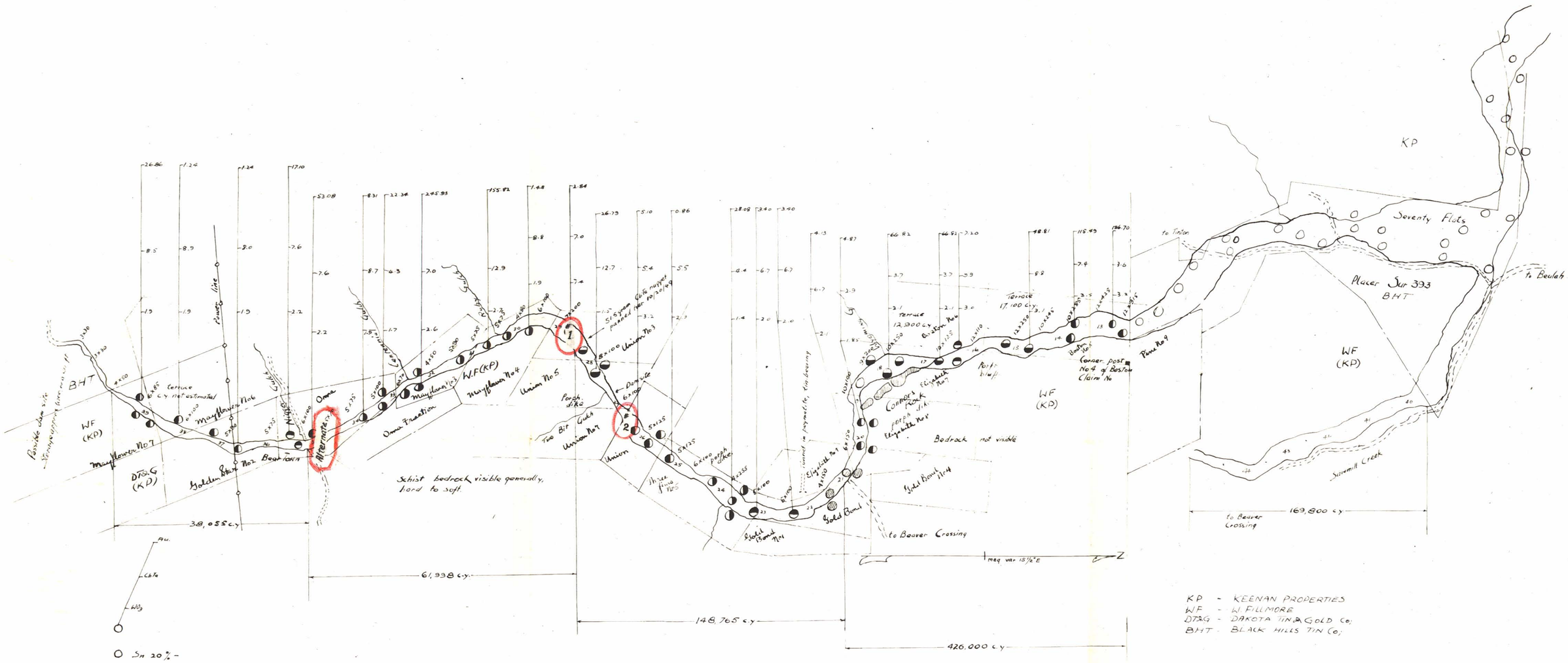
Grades of material as shown in the tables attached to the Driskill report are so different from descriptions in the text of the report and results of actual operations by the author that little confidence can be placed in the sampling program.

It can be concluded that if an accurate estimate of the yardage and grade of the Keenan property is to be made, a systematic sampling program must be inaugurated. Such a program is estimated to cost from $70,000 to $85,000 and would require 5 to 6 months.

/s/ D. H. Mullen
D. H. Mullen


Keenan Properties Lode claims showing patented and unpatented surveys:
Scale 300 feet to 1 inch. Variation 15°30' E.
Rawlins Mining District, Lawrence County, South Dakota.
Wyoming claims in Crook County, Wyoming.
Spearfish Cr.
Madeline No 1
Madeline No 2
Madeline No 3
Madeline
Madeline No 4
Madeline No 5
Madeline No 6
Josh
Josh No 1
Josh No 2
Sand Creek
Mineral Hill
Mallory Gulch
WYOMING
SOUTH DAKOTA
RAWLINS MINING DISTRICT
Florence No 1 1877
Florence No 2 1877
Rough & Ready
Giant
Volney Tantalum Hill El. 5950'
El. 6000'
Nigger Hill
Rob Roy No 1 1877
Rob Roy No 3 1877
Rob Roy No 2. 1877
BEAR Cr.
Potato Cr.
Ruby Gulch
Nigger Gulch
Centennial Gulch
Wyoming Gulch
Commercial No 3 1787
Commercial No 2 1787
Commercial 1787
New York 1787
Atlantic No 2 1787
Atlantic 1787
Baltic 1787
Boston No 5 1787
Boston No 3. 1787
Boston No 2. 1787
Boston 1787
Boston No 6. 1787
Boston No 5. 1787
Union No 1. 1787
Union No 3. 1787
Union No 5 1787
Union No 7. 1787
Union No 1 1787
Union No 4 1787
Tarosh No 8
Tarosh No 7
Tarosh No 6
Tarosh No 5
Tarosh No 3
Tarosh No 2.
Tarosh No 4
Tarosh
White Chief 1884
Eureka 1884
Porcupine No 2 1883
Bear Gulch Pl. Sur 392
May Flower No 1 1879
May Flower No 2 1879
May Flower No 3 1879
May Flower No 4 1879
May Flower No 5 1879
May Flower No 6 1879
May Flower No 7 1879
May Flower addition
Oma 1879 El. 5543'
Oma Fraction 1879
Bear
Bear No 1
Yankee Nation 1883
Washington No 2. 1787
Washington No 1 1787
Washington No 4 1787
Elizabeth No 11 1853
Elizabeth No 12 1853
Elizabeth No 10 1853
Elizabeth No 7 1853
Elizabeth No 3 1853
Elizabeth No 9
Elizabeth No 13 1853
Elizabeth No 14 1853
Pine No 9 1787
Pine No 10. 1787
Pine No 8. 1787
Pine No 7 1787
Pine No 6. 1787
Pine No 4. 1787
Pine No 2. 1787
Pine No 1 1787
Hercules 1787
Niagara No 2. 1787
George No 2. 1879
George No 1. 1879
George 1879
George No 3. 1879
Parrot
Parrot No 1
Homeward Bound
Golden Star 1879
Parrot No 2
Parrot No 3
Golden Star No 1 1879
Parrot No 4
Parrot No 5
Daisy
Daisy No 2
Golden Star No 2 1879
Parrot No 6
Parrot No 7
Daisy No 1
Belmont
Belmont No 1
Belmont No 2
Belmont No 3
Belmont No 4
Beaver Creek
BEAR GULCH DISTRICT

BEAR CREEK



- Sn 20% -
- Sn 20% +
- Sn 30% +
- Sn 35% +
- Sn 45% +
- Sn 50% +

Symbols represent tin percentages in concentrates recovered from test holes & trenches; Gold in oz. per short ton; columbium-tantalum percentage and scheelite.

Analysis by Oscar N. Brisbach, Aurora, Colorado.

Areas circled in red indicate location of test trenches, numbers 1, 2 and Alternate 2 for Exploration and Development Project, 1951.

figures by stream channel indicate depth to bedrock and width of gravel. e.g. 10x150
Sections 600 feet long measured.
numbers in sections correspond with numbers shown on Maps 3 & 4.

KP - KEENAN PROPERTIES
WF - W. FILLMORE
DT&G - DAKOTA TIN & GOLD Co.
BHT - BLACK HILLS TIN Co.

KEENAN PROPERTIES

Bear Creek Placer Ground Survey. Sept.-Oct., 1949.

Scale 1" = 600' approx.

Distances paced, compass bearings. Sections & bedrock measured. bedrock position from test pits and trenches.

Total yardage: 854,618 cubic yards, including Sawmill Gr. area.

Map 1. To accompany Report on Bear & Potato Cr. Placers

by

W. C. Dickell October 27, 1949.

MAP 1

PO.

1

POTATO CREEK

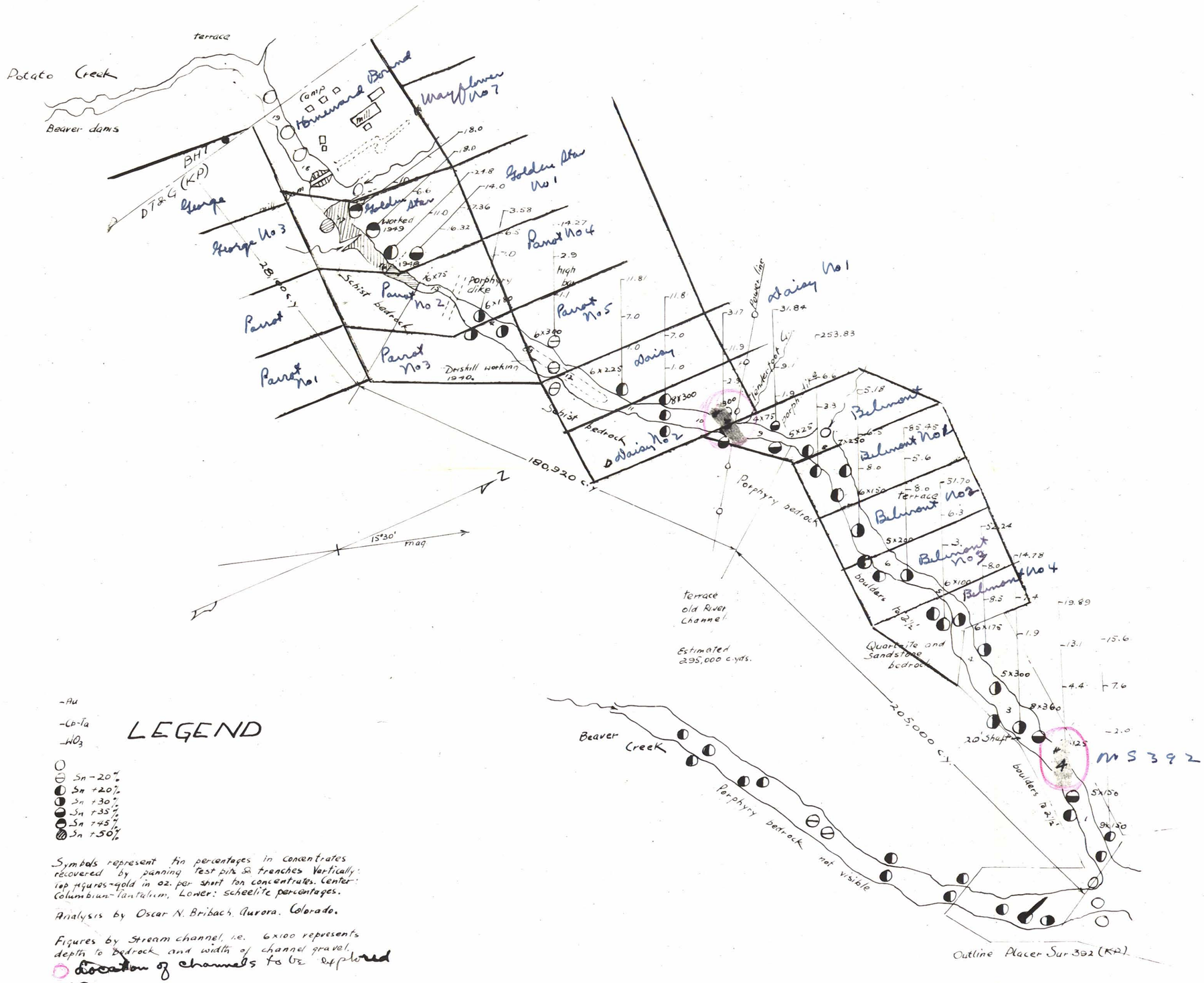
KEENAN PROPERTIES

MAP # 2.

Potato Creek Placer Ground Survey. October 1949
Scale: 1" = 600' approx

Distances paced. Section width measured, bedrock position from test pits & trenches. Total yardage excluding Sections 16-19. 579,920 c.yds.

W.C. Driskill October 27. 1949.



LEGEND

- Au
- Cb-Ta
- WO_3

- Sn - 20%
- Sn + 20%
- Sn + 30%
- Sn + 35%
- Sn + 45%
- Sn + 50%

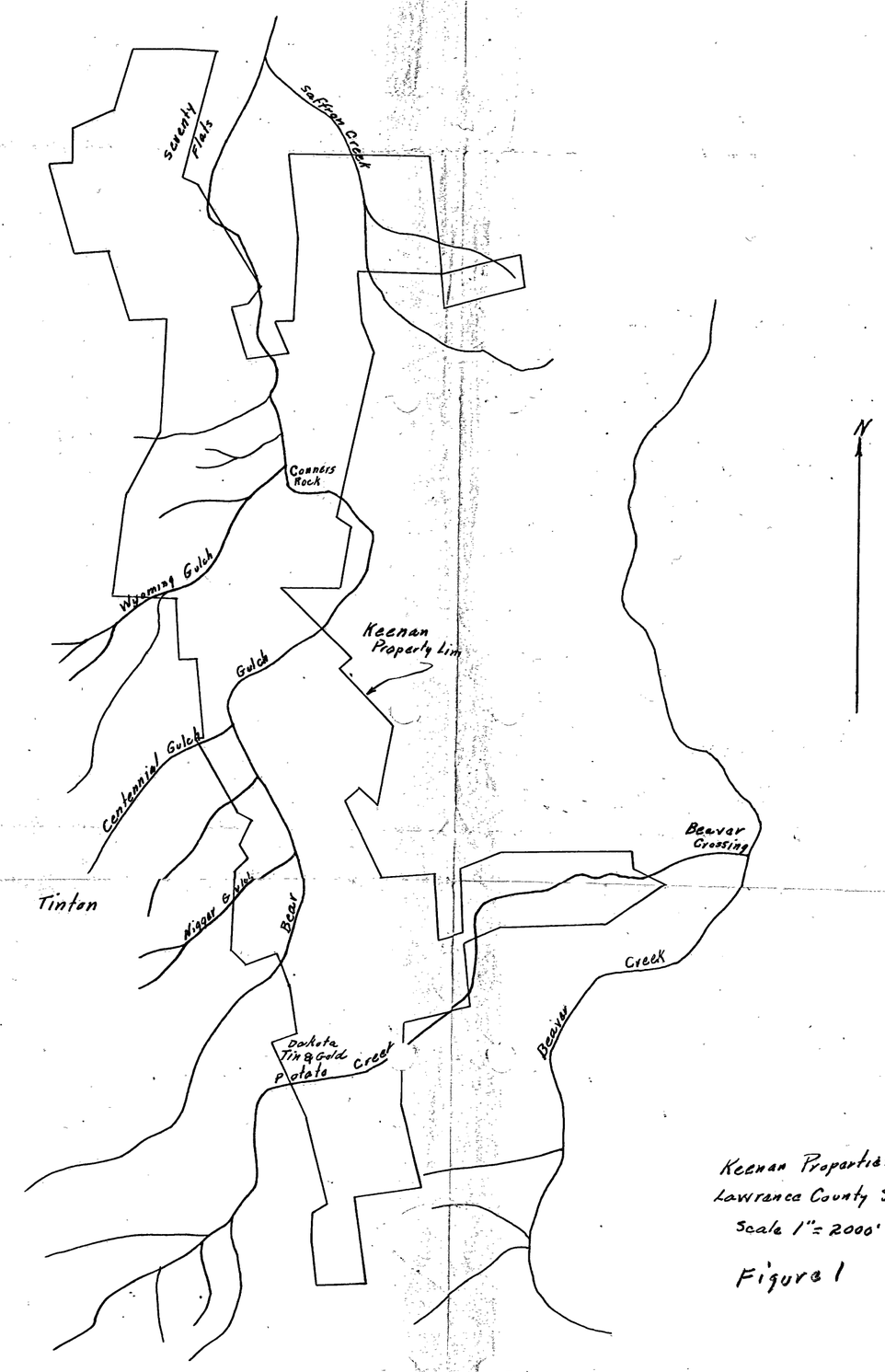
Symbols represent tin percentages in concentrates recovered by panning test pits & trenches. Vertically: top figures - gold in oz. per short ton concentrates. Center: Columbium-Tantalum. Lower: scheelite percentages.

Analysis by Oscar N. Bribach, Aurora, Colorado.

Figures by stream channel, i.e. 6x100 represents depth to bedrock and width of channel gravel.

Location of channels to be applied

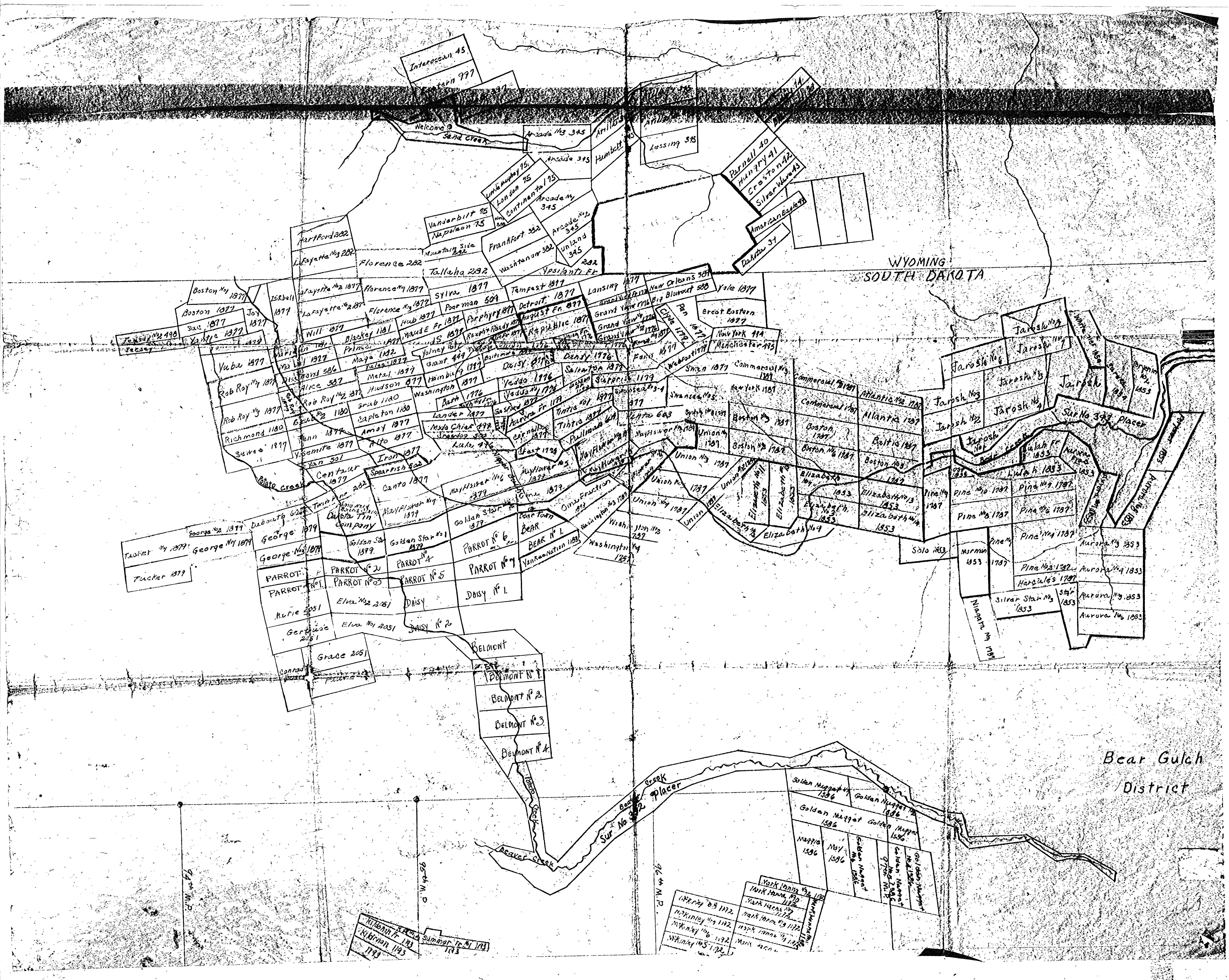
1951



Keenan Properties
Lawrence County S. Dak
Scale 1" = 2000'

Figure 1

UNIVERSITY OF MICHIGAN
MAY 16 1950


Interocean 45
Welcome
Sand Creek
Arcade No3 345
Arcade 345
Humbolt 345
Lessing 345
Parnell 40
Hungry 41
Croston 42
Silver Wave 43
American Eagle 44
Dakota 31
Little Mephey 75
London 75
Continental 75
Arcade No1 345
Arcade No2 345
Unland 345
Vanderbilt 75
Napoleon 75
Mountain Side 282
Frankfort 382
Washtenaw 382
Ypsilanti Fr.
Hartford 282
Lafayette No3 282
Florence 282
Tallaha 282
WYOMING
SOUTH DAKOTA
Boston No1 1877
Boston 1877
Sac 1877
Joy 1877
Jersey No2 498
Jersey
Isabell 1877
Lafayette No2 1877
Lafayette No1 1877
Florence No1 1877
Florence No3 1877
Sylva 1877
Poorman 509
Tempest 1877
Detroit 1877
August Fr. 1877
Republic 1877
Lansing 1877
Grand View Fr 1776
Grant View 1776
Grand View No1 1776
New Orleans 587
Big Blowout 588
Clyde 1779
Pan 1877
Yale 1877
Great Eastern 1877
New York 414
Manchester 495
Will 1877
Blackey 1181
Hub 1877
Maud E Fr 1877
Porphyry 1877
Prinse
Mage 1182
Yolney 1877
Grant 444
Baltimore
Daisy 1776
Saratoga 1877
Fair 1877
Wedcast 1877
Swan 1877
Commercial No1 1787
Commercial 1787
Atlantic No2 1787
Atlantic 1787
Baltic 1787
Yuba 1877
Rob Roy No1 1877
Dickford 586
Alice 587
Jules 1877
Metal 1877
Hudson 1877
Hamburg 1877
Washington
Yeddo 1776
Surprise 1179
Swansea No3 -4
Swansea No5
New York 1787
Rob Roy No3 1877
Rob Roy No2 1877
Grub 1180
Grub No2 1180
Capleton 1180
Bath 1776
Lander 1877
Aurora Fr 1179
Tintic No1 1877
Tintic 1877
Yenta 643
Boston No 1787
Boston 1787
Boston No3 1787
Boston No6 1787
Boston No5
Richmond 1180
Tenn 1877
Amoy 1877
Alto 1877
Mayflower No1 1787
Union No1 1787
Union No3 1787
Union No4 1787
Sewee 1877
Yosemite 1877
Yan 501
Iron 1877
Spearfish 502
Mode Chief 497
Lake 476
Cornellus 1877
Pullman
Mayflower No5 1879
Mayflower No6 1879
Mayflower No7 1879
Centaur 1877
Canto 1877
Potato creek
Twin Pine 282
Dakota Tin Company
Deboath 622
George No2 1879
George No1 1879
George 1879
George No3 1879
Tucker No1 1879
Tucker 1879
Golden Star 1879
Golden Star No1 1879
Omo Fraction
Washington No3 1787
Washington No2 1787
Washington No4 1251
Bear Town
BEAR
BEAR No 1
Yankee Nation 1183
PARROT No 6
PARROT No 4
PARROT No 5
PARROT No 7
PARROT No 2
PARROT No 3
PARROT
PARROT No 1
Daisy No 1
Daisy
Daisy No 2
Elva No2 2051
Elva No1 2051
Marie 2051
Gertrude 2051
Grace 2051
Conrad
BELMONT
BELMONT No 1
BELMONT No 2
BELMONT No 3
BELMONT No 4
Potato Creek
Beaver Creek
Sur No 392 Placer
Elizabeth No11 1853
Elizabeth No 1853
Elizabeth No7 1853
Elizabeth No3 1853
Elizabeth No13 1853
Elizabeth No14 1853
Elizabeth No9
Jarosh No8
Jarosh No7
Jarosh No6
Jarosh No5
Jarosh
Jarosh No3
Jarosh No4
Jarosh No2
Jarosh No1
Sur No 392 Placer
Bear Creek
Beulah Fr 1853
Aurora Frac 1853
Lulah 1853
Pine No9 1787
Pine No10 1787
Pine No7 1787
Pine No8 1787
Pine No6 1787
Pine No1 1787
Pine No4 1787
Pine No2 1787
Hercules 1787
Solo 1853
Morman 1853
Silver Star No3 1853
Star 1853
Niagara No1 1787
Aurora No3 1853
Aurora No4 1853
Aurora No 1853
Aurora No6 1853
Aurora No8 1853
Carpenter No2 1853
Bear Gulch
District
94th M.P.
95th M.P.
96th M.P.
97th M.P.
Golden Nugget No1 1586
Golden Nugget No2 1586
Golden Nugget 1586
Golden Nugget 1586
Maggie 1586
May 1586
Golden Nugget No 1586
Golden Nugget No3 1586
Golden Nugget No4 1586
Mark Hanna No2 1172
Mark Hanna No1 1172
Mark Hanna No3 1172
Mark Hanna 1172
McKinley No8 1172
McKinley No7 1172
McKinley No6 1172
McKinley No5 1172
Kildonan Fr 1193
Kildonan 1193
Summer Fr No1 1193

BEAR CREEK

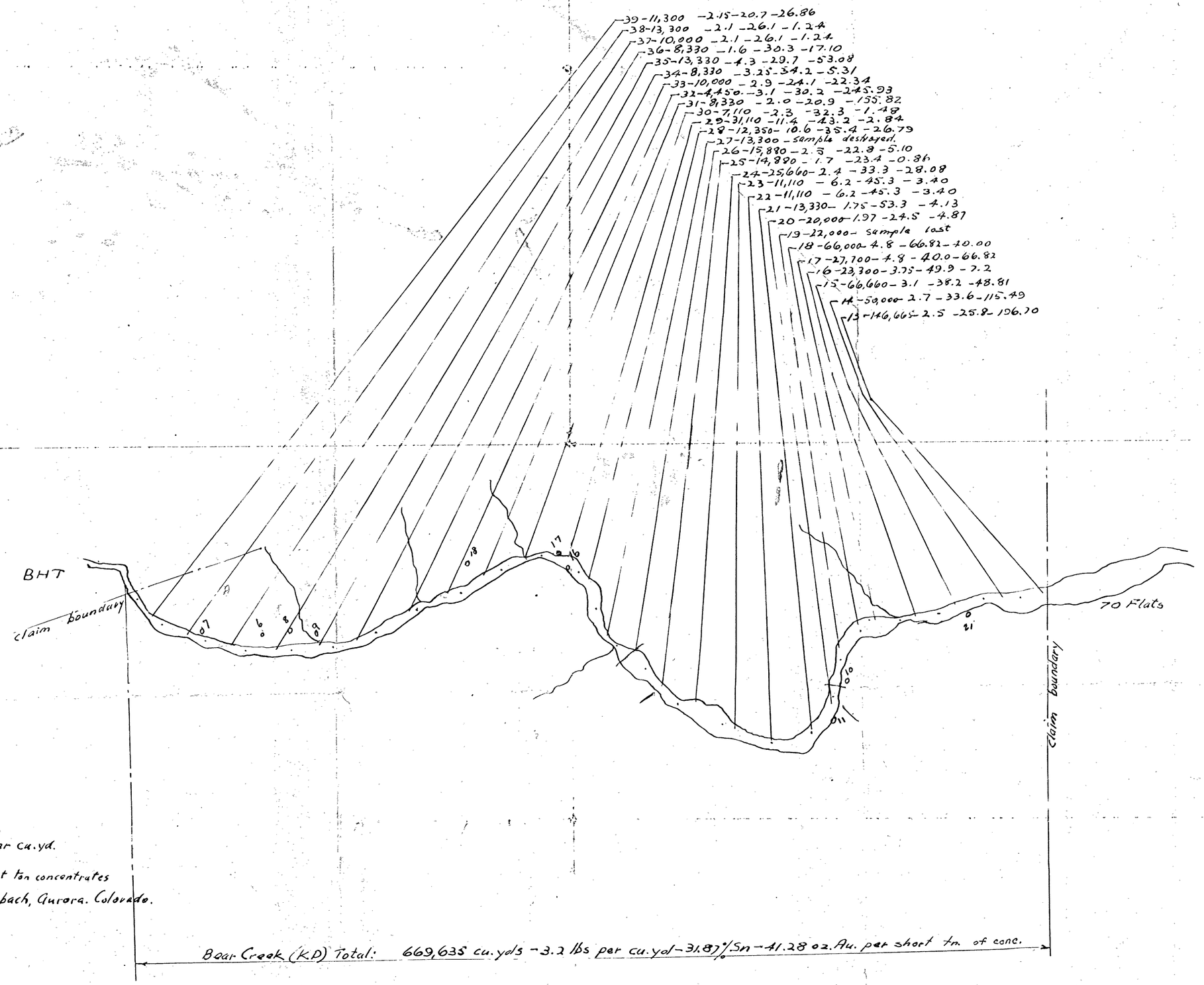
KEENAN PROPERTIES

MAP 3 -

to accompany Survey Report & maps by

W.C. Driskill

Scale: 1" = 1000 feet approx.



LEGEND

1st no - Section
2nd no - Cu. yds in Section
3rd no - lbs concentrate per cu. yd.
4th no - Tin percentage
5th no - Gold oz. per short ton concentrates

Analysis - Oscar N. Bribach, Aurora. Colorado.

Bear Creek (KP) Total: 669,635 cu. yds - 3.2 lbs per cu. yd - 31.87% Sn - 41.28 oz. Au. per short tn. of conc.

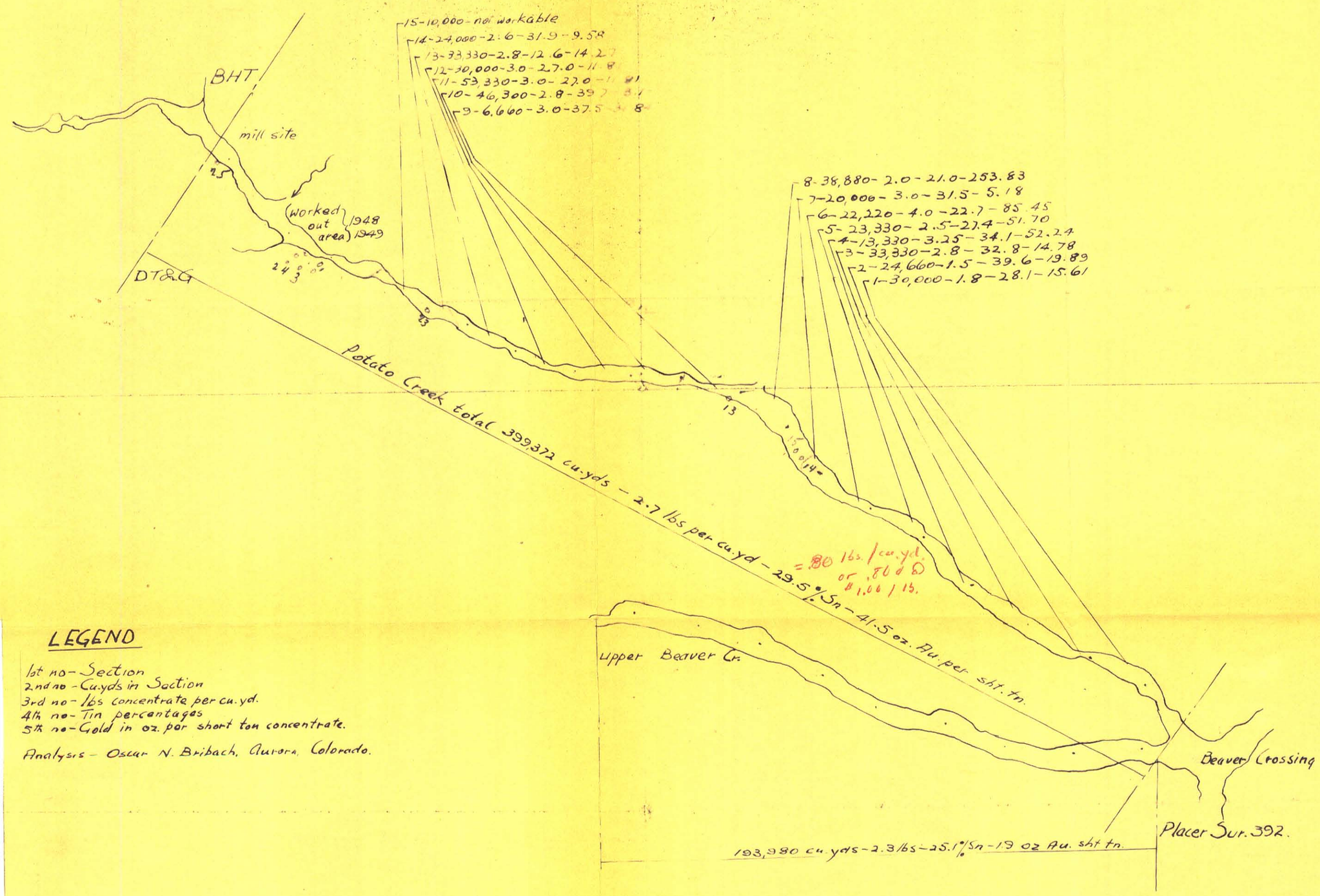
POTATO CREEK

KEENAN PROPERTIES

Map 4.

to accompany survey report & maps by W.C Driskill

Scale: 1" = 1000 feet approx.



LEGEND

1st no - Section
2nd no - Cu.yds in Section
3rd no - lbs concentrate per cu.yd.
4th no - Tin percentages
5th no - Gold in oz. per short ton concentrate.

Analysis - Oscar N. Bribach, Aurora, Colorado.